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CHAPTER IV

CHRONOLOGY

OUTSIDE the Bible three eras gained currency at an early date, namely, those of the first Olympiad (776 B.C.), the foundation of Rome (753 B.C.), and the establishment of the Seleucid power in Syria and Mesopotamia (312 B.C.). The last of these long continued in use, even by the side of the Mohammedan era (622 A.D.), and survived among the Jews until about the fifteenth century. By means of these and other less familiar eras it became possible to synchronize 'biblical' and 'profane' history; and the earliest efforts to form a single scheme of universal history may be said to begin in the third century A.D., when Julius Africanus, in the first Christian history of the world, combined biblical and other data in one comprehensive scheme. He reckoned 5500 years from the Creation of the world to the birth of Christ, and in the person of Peleg (Gen. x, 25) found a partition of the world (see p. 185 *sq.*). He was followed by Eusebius, Bishop of Caesarea, who succeeded in subordinating all his eras and dates to an era of Abraham (corresponding to 2017 B.C.). The work of the 'Father of Church History' thus gives him an honourable place among those who have sought, and with increasing success, to construct an absolute chronology of history.

The necessity of some method of reckoning time was naturally felt from an early age. On the other hand, the interest in preserving and arranging records of the past has not been so widespread. Only after a long development did the desire to record the dates of business dealings and of political and other occurrences give rise to a variety of devices which were gradually made more consistent and trustworthy. Only at a relatively late date were there efforts to synchronize different systems, and, finally, to attempt to subordinate them to national or to universal history. But, unfortunately, the most important of the more detailed of the accessible sources seems to have been already imperfect and inconsistent; and when, for example, Eusebius endeavoured to arrange his biblical and other material, in order to exhibit a comparative table of past kings and events, he was obliged to submit the numbers contained in the Bible to a candid criticism, the necessity of which has also been recognized by every succeeding historian.

In more modern times the vast and increasing accumulation of ancient historical and archaeological material has solved some serious problems, but has brought many new ones. The task of writing the history of the past has been rendered difficult, partly by the obscurity or ambiguity even of old and often more or less contemporary evidence, partly by the greater strictness of modern historical methods, and partly, also, by the fact that long before the time of Eusebius scribes and historians had frequently employed a sort of criticism of their own and have left us results which we are unable to control. Consequently, the modern historian often cannot do more than balance the probabilities; and conflicting conclusions are unavoidable, on account of the difficulty of deciding between conflicting sources, each apparently valid, and of determining the meaning or worth of historical references or allusions. Further, from time to time new discoveries are made which force some revision of historical and chronological conclusions.

From Eusebius to Ussher—whose chronological scheme found its way into the margin of the Old Testament and thus gained widespread currency in the English-speaking world—and from Ussher to the present day, solid progress has been made in determining an absolute chronology. Still, as regards the Ancient East, finality is far from attained, and in every department there are characteristic fundamental problems which have to be considered by themselves and in relation to the other departments. The chronology of Syria and Palestine is bound up with that of the Old Testament and of the surrounding Empires. The Old Testament is the most ancient of continuous historical writings, and in the past its chronology has invariably been of the first importance for universal history. But it is relatively young compared with the records of Egypt and Mesopotamia; and its chronology can be fixed only through that of Mesopotamia which is also essential for fixing the chronology of Egypt. With the chronology of Egypt is connected, to a certain extent, that of prehistoric Greece; and the evidence of both Egypt and prehistoric Greece is indispensable for dating the archaeological development of Syria and Palestine. All the chronological problems are therefore interrelated to a greater or less degree, and it will be convenient to summarize them separately, beginning with those of Mesopotamia.

I. MESOPOTAMIA

Mesopotamia (Babylonia and Assyria) and Egypt together laid the foundations of our modern systems of reckoning time and of computing the intervals between events. If, in some respects, the Egyptians were more accurate, the men of Mesopotamia paid more attention to chronology, and to them are due the division into years, months and weeks (the designation of the seven days of the week after certain deities is later), the subdivision of the day into twelve double hours, and the sexagesimal system. Their astronomical, or rather their astrological, observations go back to a very remote date, and, as the year was a lunar one, it was necessary to introduce from time to time intercalary months so that it might correspond to the solar year (p. 461). A letter of the famous king Hammurabi (*c.* 2100 B.C.) of the First Babylonian Dynasty to a governor at Larsa informs him that 'the year has a deficiency,' and that the current month was, accordingly, to be registered as the Second Elul. Mention is also made in this period of a Second Nisan and a Second Adar.

Later, in the period of the Assyrian Empire, the astronomers sent numerous reports to the king, who officially regulated the calendar and gave instructions for the insertion of the necessary intercalary month. Watch was kept for the appearance of the new moon; and in Palestine, even as late as the Christian era, the beginning of the month was fixed by personal observation on the part of appointed officials. No doubt the Mesopotamian kings were advised by the temple astrologers and other officials, who would foretell the duration of the month and the next new moon; and since contracts and other business tablets were commonly dated and preserved in the local temple, some locally authoritative calculation of time would arise in connexion with the temples.

At first each year was named after some more or less noteworthy event. The practice is natural in itself; and modern examples have been found, for example, among the Dacotas, where the events are at first often of ritual interest. On the Mesopotamian tablets the year-names refer to the building of a temple, the performance of some religious ceremony, the capture of a city, and so forth; the predominance of ritual events clearly betrays the influence of the temple. The system had many inconveniences. Sometimes the year was called 'the year after' the name of the preceding, or it was named from an event as yet unfinished or nearing completion. Two or more years might be named after the same event, or different localities would give each its own name to the same year,

so that one year might have several names. Among the Sumerians Ur-Engur (c. twenty-fifth century) fixed a single system of reckoning in place of the various local systems; but the local scribes would often add the name of their priest-king (*patesi*) to the authoritative year-name, and this jealous regard for local rights finds a much later parallel in the many local city eras of the Greek and Roman ages.

The ceremonial naming of the year probably took place at the beginning of the year at the New Year's Feast on the First of Nisan. It was then that the gods were believed to meet to decide the fate—in other words, the history—of the coming year, and the Babylonian king grasped the hands of the temple gods as a sign of his divine appointment. When the name was fixed, presumably after consultation with the temple officials, it was sent round the country, usually being abbreviated in the process. The first two years of Hammurabi are called: 'the year in which H. became king' and 'the year in which H., the king, established the heart of the land in righteousness.' His thirty-first year was 'the year in which H., the king, after that he with the assistance of Anu and Enlil, marching at the head of his troops, the land of Yamut-bal and its king Rim-Sin had brought under his power.' By associating the name of each year with the reigning king a certain degree of method was introduced; and about the same period we find that the capture of Isin was used as an era (p. 486). But it was not until the Kassite period (c. 1746), that the simple plan of dating by the years of the reigning king was definitely adopted, although it had been in use before the time of Sargon (pp. 390, 419). Here the first year begins with the First of Nisan after the king's accession, and the preceding year, the year in which his predecessor died, is the year in which *A* died or *B* entered his father's house.

Among the Assyrians the *limmu* lists form the starting-point of positive chronology. They enumerate the various officials who gave their names each to his year of office; and they sometimes also add brief references to events of political and other importance. The year of each official is the *limmu* (or *limu*), the 'eponymate,' and events are in the *limmu* of so-and-so. The practice recalls the Greek method of dating events by the local archons of Athens, the Spartan ephors, or the Argive priestesses of Hera. But there is this interesting peculiarity, that the names of the Assyrian officials begin with that of the king and are in *rota* from the higher officials to the lower, followed by governors of the old cities, and with the later addition of cities and provinces subsequently acquired. Each in turn names the year, the king leading,

until with the accession of a new king there is a fresh beginning, although sometimes the *rota* is continued irrespective of the break. The institution of the *limmu* is found even in the old Assyrian tablets from Cappadocia (p. 455), and the practice of designating the year after sacerdotal and other officials was known earlier in Shuruppak and Lagash (pp. 378, 384 *sq.*). The Assyrian method looks like a compromise between rival class and local interests; it shows the significance once attached to the honour of naming the year, and seems to point to a republican rather than a monarchical or sacerdotal origin.

In order to fix events dated by the *limmu*, lists of the eponyms are needed; and in fact the Canon or Eponym lists have proved as valuable as the catalogues of the Greek archons or the Consular Fasti of the Romans. Those as yet found extend—apart from fragments—from 893 to 666, that is, from the reign of the Assyrian king Adad-nirari II (911–890) to that of Ashurbanipal (669–625). Among the events mentioned is one in the ninth year of Ashur-dan, in the eponymate of Bur-sagale of the city of Gozan: 'a revolt in the city of Ashur; in the month of Sivan an eclipse of the sun took place.' It is now agreed that the latter observation is to be identified with the total solar eclipse of 15 June, 763, visible at Nineveh, and from this it is easy to determine all the dates in the Assyrian Canon and to co-ordinate both dates and events with what is known from other tablets of Assyrian history and from the relations with Babylonia and other countries. In addition to this, the lower part of these lists can be co-ordinated with 'Ptolemy's Canon of Kings,' that is, the list of Babylonian, Persian, Greek and Roman kings with the length of their reigns, and a record of eclipses, compiled by the Egyptian, Claudius Ptolemaeus, in the second century A.D. This list can be independently verified and shown to date from Nabonassar (747), to whose age later astrological theory ascribed the beginning of a new period. Ptolemy's dates are reckoned after the Egyptian year; and, as the first year of a king is calculated in the Babylonian style, short reigns which did not extend to the First of Nisan are ignored. Although the royal names are rather deformed, it is possible to connect Ptolemy's Canon with the Assyrian lists, and in this manner all the dates can be fixed as far back as the beginning of Adad-nirari's reign.

The foundations of Mesopotamian chronology having thus been laid, it remains to determine further details from the numerous contract tablets, historical inscriptions, chronicles, and the like. Among the records of Babylonia and Assyria the most valuable have been the synchronous chronicles, one of which deals with

the interrelations between the two countries, from the middle of the sixteenth to the end of the ninth century. Lists of kings and dynasties were compiled by scribes at various periods, and of these one of the most important comprises a list of the Babylonian kings down to the seventh century B.C. The most remarkable of ancient lists is as early as the twenty-second century B.C. (see below, pp. 152, 365), and the persistence of elaborate lists is proved by the 'Canons' preserved by later classical writers, the best-known being that which claims to be due in the first instance to the Babylonian priest Berosus.

Even in the earliest lists mistakes could easily arise, e.g. the alternative names for the same year could be counted as separate years; indeed, on closer inspection we often find discrepancies, misunderstandings and exaggerations. In addition to the actual contents of inscribed tablets, useful hints can also be obtained from a study of their palaeography, terminology and material. Attention is also to be paid to the strata in which they are discovered and their relation to other strata; and in this way the archaeological evidence may be used, sometimes to suggest a date for otherwise undated events, or to supplement, check, or revise dates obtained by other means. Striking examples of the independent value of the archaeological argument are afforded in the case of the date of Sargon I in Babylonia, and of the duration of the Hyksos invasion in Egypt (pp. 156, 169, 233).

Of the lists preserved by classical writers, most importance is commonly attached to that of Berosus, a priest of the god Bel at Babylon, who dedicated to his patron Antiochus I Soter (280–261), an elaborate work upon Babylonian or Chaldean history in three parts. Of this fragments alone remain, quoted at second-hand by Josephus, Eusebius and others. These include lists of (I) ten antediluvian kings from Alorus to the hero of the Deluge, reigning, in all, 120 *sars*, i.e. 432,000 years (a *sar* is 3600 years); (II) the kings from the Flood onwards; and (III) a narrative of events from Nabonassar to Alexander the Great. In the second part six dynasties or divisions are specified: (a) 86 kings, total 34,080 years; (b) 8 Median usurpers, 224 years (according to another reading 34); (c) 11 kings of unknown length (according to a marginal reading 48 years); (d) 49 Chaldeans, 458 years; (e) 9 Arabians, 245 years; and (f) 45 kings, 526 years.

As the lists of Berosus are presumably based upon earlier material, it is necessary to consider their value and ascertain, if possible, what underlies his remarkable scheme. It is well known that curious theories arose in the Greek and later ages concerning

vast world-periods or world-cycles, and one of these in particular popularized the notion of a cycle of 36,525 years, that is, 25 times the Sothic period of 1461 (1460) years (see p. 168). On the other hand, it is now generally supposed that, as Berosus reckoned by *sars* of 3600 years in the first part, he probably arranged the second in a cycle of 10 *sars*, *i.e.* 36,000 years. Consequently, if we deduct the exaggerated figures in (a), the remainder, it is presumed, may be accepted as the figures for those kings whom we may regard as historical. From 36,000, if we deduct 34,080 (the figure quoted by Syncellus) or 34,091 (assuming that 33,091, as cited by Eusebius, is a slip) there are 1920 or 1909 years from the mythical age of (a) to the unknown terminus of the chronological system. Now, according to Abydenus (cited by Eusebius) the 'Chaldeans' reckoned their kings from Alorus (the first of the ten antediluvian kings of Berosus) to Alexander (*i.e.* 331-323 B.C.), hence if we reckon back from 322 we obtain 2242 or 2232 as the date for the commencement of the historical period. If, however, in view of the patronage Berosus enjoyed, the date should perhaps be fixed at the beginning of the Seleucid Era (312 B.C.), the beginning will be merely ten years later.

In any event it is quite uncertain whether the notice in Berosus of the '8 Median usurpers' with their 224 years (margin 34) is really to be regarded as a reference to the First Babylonian Dynasty of 11 kings and some 300 years, or whether the starting-point is the sixth and most important king, Hammurabi. Presumably, by 'Media' we are to understand the people of the land later held by the Medes. But unfortunately the old classical writers contain so many discrepant and confused statements and figures that little reliance can be placed upon their unsupported testimony. Thus, as regards the end of the sixth division Eusebius states, after Alexander Polyhistor, that there followed a king of the Chaldeans named 'Phulus.' Phulus is the Pul of the Old Testament, Tiglath-pileser III. But Polyhistor, after mentioning the nine Arabian kings (*viz. e.* above), proceeds to say that Semiramis reigned over the Assyrians, and he then 'minutely enumerates' the names of 45 kings with their 526 years, after whom came Phulus. Now Semiramis (the Sammuramat of history) is the famous Assyrian queen of classical legend. She has a prominent position in the traditional lists of Assyrian kings extending from the legendary Ninus, the founder of Nineveh, to the equally notorious Sardanapalus, who is placed at the age of a Median invasion or, otherwise, in the time of Nebuchadrezzar (*c.* 600 B.C.). To this Assyrian empire is attributed a duration varying from 520 years (Herodotus

i, 96) to ten or even fourteen centuries. It looks, therefore, as though the scheme of Berosus has introduced the Assyrian empire together with the Babylonian, and that his list contains dynasties that were really contemporary.

On these and other grounds the testimony of Berosus is of dubious value, although we need not deny that he embodies some ancient computations. Thus, his account of antediluvian kings, although of no historical importance, is of considerable interest, partly because of the points of contact that have been found between it and the biblical tradition, and partly also because it goes back to very early Sumerian lists, where to 134 kings from the Deluge to the eleventh king of the dynasty of Isin is ascribed a total of 28,876 years, and there is a certain general resemblance between these lists and that of Berosus. Accordingly, while Berosus presents what is essentially a Babylonian tradition of the sequence of mythical and other rulers, the old Sumerian lists represent a much earlier and Sumerian tradition peculiar to Kish, Ur and other cities, before the age of Babylonian supremacy (see p. 365).

So far as the leading chronological problems are concerned, the whole course of Mesopotamian history can be roughly divided into the three pre-Christian millennia: (1) the Sumerian and Semitic periods prior to the First Babylonian dynasty; (2) this dynasty, the Kassite dynasty, and the growth of Assyria under Tiglath-pileser I; and (3) the supremacy of Assyria and its fall, the Neo-Babylonian empire, and its overthrow by the Persians. The dates for the last period can be approximately fixed through the *limmu*-lists. For the next earlier period the 'Amarna Age' is central, namely, the age of the fourteenth century illumined by the cuneiform tablets found at Tell el-Amarna in Egypt, which are to be supplemented by those found at Boghaz Keui, the capital of the Hittite empire of Asia Minor.

Sennacherib asserts in his second Babylonian campaign that he recovered certain deities which Marduk-nadin-akhe had carried off in the time of Tiglath-pileser, king of Assyria, 418 years previously. As his conquest of Babylon can be dated at 689, Tiglath-pileser was evidently reigning in 1107; and as it is known that this defeat was not in the first five years of his reign, his first year must be not later than 1112. At the same time, a boundary-stone of the Babylonian king mentions a certain victory in the tenth year of his reign, so that his first year may perhaps be dated 1117-6. Tiglath-pileser I was one of the greatest of the kings of the early Assyrian empire, and consequently the dates thus obtained are important. Moreover, he himself mentions that at the beginning

of his reign he restored a temple at Ashur which his grandfather, Ashur-dan (who 'attained to grey hairs and a ripe old age'), had pulled down sixty years previously. This allows us to fix the date of that king, who is elsewhere described as contemporary with the Babylonian Zamama-shum-iddin, who began to reign four years before the close of the Third or Kassite Dynasty. On the other hand, in an undated statement, Nabonidus (Nabu-naid, 555-539) asserts that he dug down to the foundations of the temple in Sippar built 800 years previously by Shagarakti-Shuriash, son of Kutur-Enlil. This king may be identified with Shagarakti-Shuriash, son of Kutur-Enlil who, according to the lists, began to reign 92 years before the close of the Third Dynasty and ruled for 13 years. Accordingly he must have flourished about 1339 ($539 + 800$), and the close of the Dynasty must then be dated about the first half of the thirteenth century, or about a century earlier than the date now generally accepted. But since the number given by Nabonidus is clearly a round one it need not be taken too literally.

Again, when Sennacherib conquered Babylon he recovered the seal of Tukulti-Ninurta, son of Shalmaneser of Assyria, 600 years after its capture. It is doubtful whether this occurred in the first or the second campaign of Sennacherib (702 or 689); and the figure is again a round one. But we may safely place Tukulti-Ninurta shortly after 1300. This king was the grandson of Adad-nirari, and the conqueror of Kashtiliash III of Babylon; and his genealogy is recorded back to Ashur-uballit, whose daughter married Burna-Buriash of Babylon, a contemporary of the Egyptian Amenhotep IV (Ikhnaton) who can be independently dated at 1380. These are not, indeed, final dates; there are discrepancies and inconsistencies, but the broad outlines are clear.

The Third or Kassite Dynasty, to which the late Babylonian Royal List ascribes 36 kings reigning 576 years, 9 months, can be provisionally dated about 1746-1169. There are unfortunately great gaps in the middle; and while the lower end can be associated with the history of the 'Amarna' and later ages, the upper portion is more obscure. To the First (Babylonian) and Second dynasties are ascribed by the old lists 11 kings each and totals of 304 and 368 years respectively, and on the assumption that all three dynasties were consecutive it was supposed that the First began c. 2440 B.C. But it has since been discovered that the Second Dynasty (that of the Sea-Lands, or Lower Babylonia) was partly contemporary with the First and the Third, and consequently the dates must be considerably reduced.

Now, the Babylonian Nebuchadrezzar I, who was a contem-

porary of the father of Tiglath-pileser I, and therefore flourished about the latter half of the twelfth century, was separated, according to a boundary stone of the period, by 696 years from Gulkishar, who is known as the sixth king of the Second Dynasty. But since the stone refers to events in the fourth year of his immediate successor, Enlil-nadin-apli, we have a round seven centuries between the latter and Gulkishar, and the figure 696 at once loses its semblance of precision. At all events, if Gulkishar (who reigned 55 years) may be placed about the middle of the nineteenth century, the beginning of the dynasty—the five preceding kings are assigned a total of 193 years—will evidently be a couple of centuries earlier. The first of these, Iluma-ilu, waged war with Hammurabi's son (Samsu-iluna) and grandson (Abi-eslu); and the famous Hammurabi himself, according to Nabonidus, flourished seven centuries before Burna-Buriash, who, as we have seen, was a contemporary of Amenhotep IV (*c.* 1380). The great Babylonian king, whose name probably reappears in Amraphel, one of the kings said to have been defeated by Abraham (Gen. xiv), can therefore be dated about 2100 B.C. The coincidence is interesting, but perhaps may only be due to common reliance upon the same chronological scheme. However, the same date has been reached through a series of tablets of astrological omens derived from observations of the planet Venus, and containing a precise reference to the eighth year of Ammi-zaduga, whose reign can be dated on independent astronomical grounds at 1977. As the lists place him 103 years after Hammurabi's reign of 43 years, we can thus obtain for the latter the date, 2123–2081.

On the other hand, quite another indication is afforded by Shalmaneser I, who, as the father of Tukulti-Ninurta, flourished soon after 1300 B.C. He refers to the building of a temple in Ashur by Ushpia; which was rebuilt by Erishu, and 159 years later again rebuilt by Shamshi-Adad, and finally after 580 years burned down in his own reign. But Esarhaddon, who lived some six centuries later, gives the figures as 126 and 434. If we accept the former, Erishu may be dated about 2040, and if his father Ilushuma may be identified with the contemporary of Sumu-abu, the founder of the First Dynasty, the lists reckon 102 years from his accession to that of Hammurabi. If, on the other hand, we accept the latter, the beginning of the Dynasty would be in the first half of the twentieth century. In either event the date of Hammurabi is brought considerably below that previously mentioned, and the difference between the figures of Shalmaneser and those of Esarhaddon is a disconcerting example of the difficulties of Mesopo-

tamian chronology. For the sake of completeness it may be added that Shamshi-Adad, who, according to Esarhaddon, was the son of Bel-kabi, is also the name of a contemporary of Hammurabi; and if 159 (or 126) years sever him from Erishu, the latter's father is severed by 102 years from Hammurabi. But another of the same name, son of Ishme-Dagan, is mentioned by Tiglath-pileser as restoring the temple of Anu and Adad in Ashur, 641 years before it was pulled down by Ashur-dan (named above), and must therefore have lived *c.* 1820 (perhaps 1840–1821). A third of the name should, however, probably be presumed, an experience by no means uncommon in dealing with little-known kings of Mesopotamia (see pp. 490, 568 *sq.*).

Finally, no unambiguous indication is afforded by the statement of Ashurbanipal (*c.* 650) that he recovered an image which the Elamite Kutur-nakhhunte had carried off 1635 years earlier (*c.* 2280), as it is uncertain whether the events he refers to occurred during the Elamite campaigns in the First Babylonian Dynasty or earlier (see p. 471).

Consequently the dates of the early Babylonian dynasties cannot be fixed with the precision desired; and although the discovery that the first three dynasties are not to be reckoned consecutively has narrowed the extent of the divergence in modern computations, the chronological schemes that have been proposed vary according to their reliance upon the trustworthiness of the references already mentioned, and of the figures in the Royal Lists and other summaries.

As for the earliest period the dates depend primarily upon the history and chronology of the dynasties in question. It is true that the dynasties of Ur and Isin have been dated on the basis of a reference to the capture of Isin by Rim-sin of Larsa in the seventeenth year of Sin-muballit, the father of Hammurabi. On this view the two dynasties of five and eleven kings, reigning 117 and 225 years respectively, then came to an end, and their commencement would be about three-and-a-half centuries before the age of Hammurabi. The evidence, however, is inconclusive, and whatever other points of contact can be found, there always remains the solitary chronological notice for which Nabonidus is once more the authority. He declares that he saw the foundation inscription of the temple of Naram-Sin, son of Sargon of Agade, which no one had seen for 3200 years. As he lived *c.* 555–539, at a stroke we are taken back to the thirty-eighth century B.C., far removed from all tangible and consecutive history. On the other hand, we should note that (1) in an old chronicle the section concerning

Dungi, the second king of the dynasty of Ur (*c.* twenty-fifth century) follows immediately after that concerning Naram-Sin. Moreover (2), for palaeographical reasons, the age of Sargon and Naram-Sin can hardly be severed by any great interval from the other early dynasties. Finally (3), at Nippur the pavement of Ur-Engur, the first king of the dynasty of Ur, rested immediately upon the brickwork of Naram-Sin (*cf.* also pp. 390, 419 *sq.*, 426). On these and other grounds, it has been found impossible to accept the extraordinary figures of Nabonidus, and we should perhaps assume a simple clerical mistake and reduce his figure to 2200. Against the view that Naram-Sin fought Menes of Egypt, and that Sargon's age can be dated by Egyptian chronology, see pp. 171 *sq.*, 303 *n.*

The chronological framework of Mesopotamian history therefore rests primarily upon a combination of fixed dates (the *limmu* lists), early computations, synchronisms and lists, and on the interpretation of the relevant historical and other notices and allusions. For further details reference must be made to the discussions in the following chapters, and the tables at the end of the volume. Below are given some of the chief dates—most of them only approximate—of leading authorities, *viz.* Jastrow (J), L. W. King (K), Langdon (L), Eduard Meyer (M) and R. Campbell Thompson (T).

Sargon of Agade . . .	2872 (L), 2650 (K), 2500 (J, M).
Dynasties of Ur and Isin . . .	2474—(L), 2400—2100 (K), 2304—1963 (M), 2300—1980 (J).
First Dynasty of Babylon . . .	2225—1926 (K, T), 2060—1761 (J, M).
Hammurabi . . .	2123—2081 (K, T), 1958—1916 (J, M).
Second Dynasty (the Sea-Country) . . .	2085—1718 (Ungnad), 1910—(M), 1900— 1720 (J), 2070—1703 (T).
Third (Kassite) Dynasty . . .	1760—1185 (K), 1746—1169 (T).
Gulkishar . . .	1877—1823 (J, T).
Shalmaneser I . . .	1276—1257 (T).
Nebuchadrezzar I . . .	1146—1123 (T), <i>c.</i> 1140 (K).
Tiglath-Pileser I . . .	<i>c.</i> 1125 (J), 1115—1103 (T).
Marduk-nadin-akhe . . .	<i>c.</i> 1110 (K).
Tiglath-Pileser III . . .	745—727 (J).
Nebuchadrezzar II . . .	604—561 (K).
Nabunaid (Nabonidus) . . .	555—539 (K).

II. THE OLD TESTAMENT

Although ordinary ideas of the history of the ancient East have commonly been based upon the Old Testament, the latter has no true era and its dates are a matter of careful computation. It certainly contains very precise chronological schemes, but these are

distinct from, and often inconsistent with, the narratives embedded in them. Thus, in the book of Genesis, the elaborate chronological scheme that runs through the book will often represent the patriarchs as being of an age very different from what we should expect from the popular stories. In point of fact the Israelites entered history after the best days of Egypt and Babylonia, and, like the Arabs of the days of Islam, they were in several respects relatively simple. For example, they maintained the practice of reckoning periods and historical vicissitudes in terms of genealogies and generations, similar to the early pedigrees of the Greeks. But the duration of a generation is obviously variable, and the genealogical lists are wont to suffer from interpolation or abbreviation, whether accidental or intentional.

On the other hand, we certainly find events dated by reference to other events, *e.g.* to the Exodus (Ex. xvi, 1), the capture of Ashdod (Is. xx, 1), and the Exile (Ezek. xxxiii, 21). The prophecy of Amos is dated two years before what was evidently an earthquake of unusual severity; and as a rule the prophecies are dated more or less fully by the year or reign of a king (even of Babylonia) or kings. In the Books of Kings events of importance for the temple are dated after the reigning king, and it is possible that some systematic record was kept in the temple-archives. This is suggested also by the character of the more elaborate chronological schemes; and, while there is reason, as we shall see, to assume that there was some knowledge of Mesopotamian chronology, the statement (Num. xiii, 22) that Hebron was built seven years before Zoan (Tanis) in Egypt testifies to some synchronism—not necessarily trustworthy—of Egyptian and Palestinian affairs. This association recalls the zeal of the rival historiographers of the Ptolemaic and subsequent periods who vehemently and rather maliciously expatiated upon early relations between Jews and Egyptians at the time of the Hyksos kings and the Exodus.

Now, although Tanis itself dates from before the eleventh dynasty of Egypt, it was rebuilt by Ramses II (thirteenth century); and if there were some tradition of the founding of Hebron in the same period, the old belief, recorded by Josephus, that Tyre, too, was founded one year before the fall of Troy (and therefore about 1200 B.C.), or 240 years before the building of Solomon's temple (and therefore *c.* 1180), may point to some common chronological tradition of the importance of the age in question. Tyre itself was in truth a much older city, but the interest of the old chronological data lies often, not in their face-value, but in their testimony to early schemes or theories of history. This is especially true as

regards the biblical chronology from the Creation of Man to the Deluge and thence to the time of Abraham. Here the attempts to fit the numbers into some reasonable scheme have always been hindered by internal discrepancies in the numbers, and by the numerous variations between the Hebrew (or Massoretic) text, the Samaritan recension of the Pentateuch, and the Greek versions. Even in 1738 Des Vignolles knew of about 200 different attempts to compute the earliest period: the date of the Creation ranging from 6984 to 3483 B.C. And while the Jews reckon it at 3760 the Greek Church has accepted 5509. Archbishop Ussher's calculation (4004 B.C.) in some way found a place in the reference editions of the Authorized Version, and his system (published 1650-4) and that of Dr William Hales (1809-1814), have frequently been quoted and often regarded as final. Ussher did not strictly follow the Old Testament, according to which the dates for the Creation and the Deluge would be 4157 and 2501 respectively, whereas his figures are 4004 and 2348 (Hales 5411 and 3155). He allowed 4000 years between the Creation and the birth of Christ in harmony with the belief that the world would last 6000 years, namely, 2000 before the Law, 2000 under it, and 2000 years under the Messiah. In thus subordinating the numbers to a definite and, in this case, a Christian conception of world-history, he merely followed in the footsteps of earlier speculations (Babylonian, Persian, etc.), a clear trace of one of which can probably be found in the biblical figures themselves (p. 165).

As we descend, the chronological notices become less untrustworthy and Ussher's date for the accession of David (1056 B.C.) is probably only about fifty years too early, while that for the fall of Jerusalem (588 B.C.) is almost exact. The period of the Hebrew monarchies is in fact the starting-point of an absolute chronology, thanks to the Assyrian *limmu*-lists, which have already been described. But although a few dates of biblical history can thereby be definitely fixed, much still remains uncertain owing to the nature of the biblical evidence itself.

In the history of the divided monarchies of Judah and Ephraim (or Israel) the length of the reign of each king is given, and his accession is dated by the regnal year of the rival dynasty. The period from the schism, when Rehoboam and Jeroboam presumably began to reign contemporaneously, to the fall of the northern kingdom in the sixth year of Hezekiah of Judah, is divided into two by the contemporary accession of Athaliah, queen of Judah, and Jehu of Israel. In the first subdivision, however, the synchronistic schemes reckon 88 years, whereas the reigns of the

kings total 95 and 98 for Judah and Israel respectively. (The Septuagint, by adding three years to the reign of Abijam of Judah, equalizes the numbers, 1 Kings xv, 2.) Now, the first year of a king could be that after the year in which his predecessor died (the Babylonian method); or it might be that year itself (the Egyptian method), in which case it could be counted twice over (as the last year of the dead king and the first of his successor). This double reckoning is seen in the case of Nadab and Elah, who are assigned each two years, although the synchronism shows that the reign of each began and ended in one year (1 Kings xv sq.). Traces of the simpler reckoning are preserved, however, both in the Hebrew text and in an important recension of the Septuagint (Lucian's); and if we allow for the double reckoning the years of both monarchies during the first subdivision amount to 89. This is so far satisfactory. In the second subdivision, on the other hand, there are irreconcilable discrepancies: 170 years are reckoned by the synchronisms, but the reigns amount to 165 and 143 for Judah and Israel respectively, and when allowance is made for double reckoning, the figures are 158 and 135.

There is reason to believe that the synchronisms are of secondary origin and a later insertion in the history; and, in fact, for the time of Jehoshaphat and Ahab there are traces in the Septuagint of another system (1 Kings xvi, 29; xxii, 51; 2 Kings i, 17). In addition to this, not only are the totals of the reigns sometimes open to suspicion on various historical grounds, but it would also seem that the kings of Judah and of Israel were supposed to reign 480 and 240 years respectively, and that each of these grand totals was artificially subdivided into three equal portions. Thus, the Aramean wars of Israel continued 80 years and form the second of three periods of 80 years each; and the second subdivision of the Judaean period comprises the 160 years from the temple reform of Joash to the death of Hezekiah. Moreover, while Solomon is said to have begun to build the temple in the 480th year after the Israelites came out of Egypt, it has been computed that 480 years from the lower date would carry us to the end of the Exile. This calculation is on the assumption that the Exile lasted only 50 years, the true number being quite uncertain. Further, it is at least a coincidence that the total 480 represents roughly 12 generations, of 40 years each, that twelve generations of priests can be calculated from the Exodus to the days of Solomon's temple (1 Chron. vi), and that there are eleven high-priests of the temple to Jehozadak, who was carried into Exile.

The earliest absolute date is furnished by the Assyrian record

of the defeat by Shalmaneser at Karkar of a confederation including Aḥabbu Sir'lai, who is presumably the Israelite Ahāb, son of Omri. This can be dated at 854 B.C. Twelve years later Shalmaneser records the payment of tribute by Yaua, son (*sic*) of Omri, who is evidently the Jehu who overthrew the dynasty of Ahab. But it is only with difficulty that the biblical account of Ahab's successors, Ahaziah and Jehoram, and of the relations with the Arameans, can be made to fit into the twelve years. Still, it may be assumed that the Assyrian year is to be reckoned, as usual, from the spring, and the Hebrew, in accordance with the earlier usage, from the autumn, and that Ahab died during the year 855 (autumn)—854 (autumn).

These dates 854 and 842 are commonly accepted. Calculating back, and allowing for double reckoning, the accession of Rehoboam and Jeroboam is inferred to be 932, that of Solomon 970, and that of David *c.* 1010. The results obtained approximately agree with external Phoenician and Egyptian sources. For Ahab married the daughter of Ethbaal of Sidon, in whose reign Menander of Ephesus records a one-year famine which Josephus identifies with that at the beginning of Ahab's reign; and the Phoenician lists allow the dates 878–866 for the reign of Ithobal (Ethbaal) and 969–936 for that of Hiram, Solomon's contemporary. As for Egypt, only one synchronism can safely be found, namely, Shishak, who was contemporary with the close of Solomon's reign, the rise of Jeroboam and the reign of Rehoboam (p. 173). 'Zerah the Ethiopian,' defeated by Asa (2 Chron. xiv), has been identified with Shishak's successor Osorkon; but, although the Chronicler may have wished to make this synchronism, the narrative itself does not seem to have referred originally to an Egyptian invasion, but to one from Arabia.

After 842 the next definite date is furnished by the mention of *Menihim* (Menahem), of *Samerināa* (Samaria), among those who paid tribute to Assyria in the eighth year of Tiglath-pileser III, *i.e.* 738. The 104 years that intervene agree tolerably with 112, the total of the regnal years of the seven kings of Israel from Jehu to Menahem inclusive. Serious difficulties now arise. Menahem was succeeded by Pekahiah (2 years), Pekah (20 years), and Hoshea, in whose ninth year Samaria fell (2 Kings xvii, 6; xviii, 10). But Tiglath-pileser relates (in 733) that he himself placed Hoshea on the throne, Samaria was besieged by Shalmaneser in 724–722, and the fall of the city was claimed by Sargon in 722. Here there is obviously no room for Pekah's long reign, and the relationship between him and Pekahiah (to whom Lucian's recen-

sion ascribes 10 years) is far from clear. Various proposals have been made, and it is at least certain that the fall of the northern kingdom was quicker than it is represented to have been in the chronological scheme of the biblical writer, according to which the last third of Israel's 80 years consisted of 40 years of glory under Jeroboam II, and 40 years of decline.

Nor are the difficulties less when we turn to Judah. The fall of Samaria was in the sixth year of Hezekiah (2 Kings xviii, 10). According to the biblical figures this was 165 years after the accession of Athaliah in 842, *i.e.* at the impossibly late date of 667; but as they also reckon 139 years to the fall of the Judæan kingdom in 587, we arrive at the date 727 or 720 (according as we adopt the longer or shorter computation). The date 720 is preferred on independent grounds; since, if, as we are told, Hezekiah became king in the third year of Hoshea at the age of 25, and his father Ahaz died at the age of 36 after a reign of 16 years (2 Kings xvi, 2; xviii, 1), Ahaz would be about 10 years of age when his son was born! Moreover, Ahaz is mentioned among the tributaries of Tiglath-pileser III in 728, and, according to Is. xiv, 28, he died in the year when Philistia was threatened, a reference, as is held, to Sargon's expedition of 720. On the other hand, a still later date has been suggested, since Sennacherib's invasion of Judah in the fourteenth year of Hezekiah (2 Kings xviii, 13) can be definitely dated in 701, and this gives us 715 as the year of his accession. On the assumption that the story of the sign given to Hezekiah (2 Kings xx) had its basis in some eclipse, astronomical calculations have dated this in 679 (which is clearly too late), or in 710 (14 March 711-10), the year when Sargon took Ashdod. Moreover, the embassy of Merodach-baladan (2 Kings xx, 12), now associated with Hezekiah's sign and the promised defence of Jerusalem (*v.* 6), can be dated on independent grounds either during the former's short lease of power in 702, or, preferably, during his earlier reign (721-710), when he was at length driven out by Sargon. In addition to this, further difficulty is occasioned by the possibility of a second invasion of Palestine by Sennacherib after 701, and by the date and identification of 'Tirhakah, King of Ethiopia.'

In consequence of these difficulties the history of this important period cannot be finally dated, nor is it possible to recover with any confidence the chronological schemes of the early writers. As another instance of the internal intricacies, it may be observed that a period of enmity between Judah and Israel culminated in the defeat of Amaziah and the partial destruction of Jerusalem by Jehoash of Israel. Forthwith Judah and Israel flourished under

the long rule of Azariah (Uzziah) and Jeroboam II respectively, and the latter's reign of 41 years ended in the thirty-eighth year of the former. But according to another notice, while Jeroboam began to reign at once, Amaziah 'lived' (not 'reigned') 15 years (xiv, 17, 23), and, according to a third, there is a gap of 12 years, and it is not until the twenty-seventh year of Jeroboam that the great Judæan king came to the throne (xv, 1).

For the close of the Judæan monarchy the starting-point is the defeat of Necho of Egypt by Nebuchadrezzar II, at the battle of Carchemish. According to the biblical evidence, this was in the first year of Nebuchadrezzar, 'king of Babylon,' and in the fourth year of Jehoiakim of Judah (Jer. xlv, 2; cf. xxv, 1). On the other hand, we learn from Berosus that his father Nabopolassar was still reigning, but died shortly after the victory. Thus there is a discrepancy as regards the true date of the first year of Nebuchadrezzar. Now, after Jehoiakim's reign of 11 years, Jehoiachin was carried off after a brief three months, and accordingly this is called the eighth year of Nebuchadrezzar (2 Kings xxiv, 8, 12). Jerusalem was again besieged from the ninth to the eleventh years of Zedekiah, and was captured in Nebuchadrezzar's nineteenth year (xxv, 1, 2, 8). On the other hand, another statement, not in the Septuagint, specifies two captivities in the king's seventh and eighteenth years, and a third, otherwise unknown, five years later (Jer. lii, 28 *seq.*). Finally, while to Nebuchadrezzar is ascribed, by Berosus, a reign of 43 years, his successor Evil-Merodach (Amil-Marduk) at once liberated Jehoiachin, who had been in captivity a few days short of 38 years (2 Kings xxv, 27). These discrepancies remain, and consequently the dates have not been settled unanimously. Nebuchadrezzar's death is dated 562 or 561, and the final fall of Jerusalem is fixed at 587 or preferably 586.

As regards the length of the Exile, the familiar three-score years and ten is too long (Jer. xxv, 11 *seq.*; Zech. i, 12, etc.). The first year of Cyrus can be independently fixed at 538-7; and the foundation of the new Temple in 536 (Ezr. iii) fits in with the fifty years during which, according to Josephus (*contra Apion.* 1, 21), the temple had been desolate. The allowance in Matthew 1, of fourteen generations from the Exile to the birth of Christ ($14 \times 40 = 560$), also agrees fairly with the results. Thenceforth dates can be more readily determined: *e.g.* the prophecies of Haggai and Zechariah in the second year of Darius (520), and the return of the Jews under Ezra in the seventh year of Artaxerxes (458). But the historical problems themselves are exceedingly intricate. There was an increasing and astounding ignorance of this age, and the

book of Daniel even gives currency to a tradition that Darius preceded Cyrus (v, 31; vi, 28). It is not at all certain that the above-mentioned Artaxerxes was the first of the three kings who bore that name, and here as elsewhere the chronological questions are bound up with questions of historical criticism.

For the periods before the kings of Judah and Israel there are no fixed dates. According to a late and doubtful statement, when Solomon began to build the temple in his fourth year (*c.* 967, see above) 480 years had elapsed since the Israelites came out of Egypt (1 Kings vi, 1). The various biblical chronological notices amount to 534 years, and this number is exclusive of the rule of Joshua, Samuel and Saul. Various acute efforts have been made to harmonize the statements, and it is observed that, if we reckon 480 years as equivalent to 12 generations, we can count 12 priests from Eleazar's son to Solomon's priest Azariah (1 Chron. vi, 3-10), and 12 prominent leaders (Moses, Joshua, Othniel, Ehud, Deborah, Gideon, Jephthah, Samson, Eli, Samuel, Saul and David). On these figures the Exodus would have occurred in the fifteenth century (967 + 480); whereas, if we accept the figure 534, or the figure given by Josephus for the interval (*viz.* 612, *c. Ap.* 11, 2), this event would be a century earlier.

If, however, we attempt to reckon forward from the time of Abraham, we have a choice of variant traditions. The patriarchs were in Palestine 215 years (Gen. xii, 4, and other notices), and the Israelites remained in Egypt for 400 years (Gen. xv, 13) or 430 (Ex. xii, 40). Hence an interval of 615 (or 630) years separates Abraham from the Exodus. But the Septuagint, by allowing 430 (or 435) years for the entire interval (similarly Gal. iii, 17), reduces the length of the Egyptian period to 215 years. Similarly, Gen. xv, 16, represents a period of merely four generations, and with this agree approximately the genealogical lists (Ex. vi, 14-27, Numb. xxvi, 59; Josh. vii, 1); and Joseph is even said to live to see his grandchildren who were contemporaries of Moses (Gen. 1, 23; Num. xxxii, 39-41).

If we leave the biblical notices and consider the external evidence, the first clue should be the date of Hammurabi, with whose name we may doubtless identify that of Abraham's foe Amraphel (Gen. xiv). It is not impossible that there were records or traditions synchronizing the two, and consequently the first half of the twenty-first century would be a plausible date for the Hebrew patriarch. It is then possible that the descent of Jacob or Israel into Egypt, 215 years later, represents the biblical writers' idea of the Hyksos invasion; in any case, the Hyksos period made a great im-

pression upon late Alexandrian writers, and Jewish historians may not unnaturally have striven to co-ordinate Jewish and Egyptian tradition (see pp. 222, 311). All this, however, is entirely conjectural; and we are not on much surer ground when we attempt to date the Exodus by external evidence. If the Israelites built Pithom and Raamses in the time of Ramses II (Exod. i, 11), the Exodus is consequently later (thirteenth century), and the figures for the period from the Exodus to Solomon must be considerably reduced. And if we adopt this thirteenth-century date, and enquire when Israel descended into Egypt, the variant traditions of the duration of the bondage allow abundant range. It has been varyingly suggested that the sons of Jacob or Israel entered with the Hyksos and came out with them, or that it was only after the exodus of the Hyksos that there arose the king who 'knew not Joseph.' But Joseph has also been identified with a minister of the time of Amenhotep IV (c. 1380), and even with a later Semitic official (c. 1200) before the rise of Ramses III.

External history may suggest that the biblical chronology of the period from Abram (Abraham) to David and Solomon should be subordinated to what is known of the Hyksos, or connected with the movements of the time of Amenhotep III and IV. In any event, the activity of the Philistines before the rise of the Hebrew kingdom and the fact that this independent monarchy itself could arise owing to the weakness of the surrounding empires, may certainly be said to support the broad outlines of the biblical history. Yet it must be recognized that there is a complicated blend of trustworthy and untrustworthy material, not unlike what may be found in Berosus, or in the Alexandrian writers, or in such a work as Geoffrey of Monmouth's *Historia Britonum*, and this precludes any further attempt to disentangle the chronological intricacies without the help of conclusive external evidence.

As becomes more evident when we approach the pre-Abrahamic period, the figures, although of extraordinary precision, represent particular schemes and calculations, the source of which can hardly be conjectured. It is possible to compute 2666 years from the Creation to the Exodus, and this number is two-thirds of a cycle of 4000. Following this up it has been observed that if we regard this number as 26 centuries or generations, we may assign 20 from Adam to Abraham, one each to Isaac, Jacob, Levi, Kohath, Amram, and Aaron, while the fraction remains for Eleazar, who was an adult at the time of the Exodus. This does not stand alone. Through the loss or the addition of whole hundreds the figures from the Creation to the Deluge are 1656

(Hebrew text), 1307 (Samaritan version) and 2242 or 2262 (Septuagint). But it is at least a coincidence that the number 2262 approximates to the 2280 which Africanus, on the authority of Manetho, gives for Egypt from Menes to the end of the XIth Dynasty; and it is possible that the Septuagint was acquainted with Manetho's chronology. Again, the 432,000 years ascribed by Berosus to the 10 antediluvian kings of Babylonia represent 86,400 *lustra*, and the same number of weeks would represent 1656 years, the number given by the Hebrew text. Accordingly, the Hebrew 'week-unit' would seem to correspond to a Babylonian unit of five years; and, in a word, the general result is to indicate a complexity which is probably due to the fusion of different systems and schemes.

It is quite typical, therefore, that in the Pentateuch there are two full forms of dating, the one by day, month and year (Num. i, 1, etc.) and the other by year, month and day (Num. x, 11, etc.), and that these correspond respectively to Mesopotamian and Egyptian methods. Again, while the Jews came to adopt the Babylonian names for the months, and to transfer the beginning of the year to the spring, the final chronological system seems to show conformity to Egyptian reckoning, *viz.* by months of 30 days and a solar year of $365\frac{1}{4}$ days. Yet besides Egyptian and Mesopotamian influences, there was, it would seem, an elaborate system of reckoning by generations of 40 years, and this rather rudimentary system is entirely characteristic of the more simple and *naïve* life and thought of the Israelites.

It is regrettable that the fixed dates of the Old Testament should be so few. But the historical books in their present form are relatively quite late. They are the result of complicated editorial processes which are also reflected in the intricacies of the chronological frameworks, wherein earlier narratives and sources have been fitted and adjusted to much later conceptions of monarchical history, of the history of the Hebrews, and of the history of the world as then known. Still, it must be more than a coincidence that Hebrew post-diluvian tradition enters upon a new stage with Abram who is assigned to an age evidently contemporary both with that of Hammurabi (of the First Babylonian Dynasty) in Mesopotamia, and with that of the XIIth Dynasty in Egypt. The era of Abraham adopted by Eusebius thus has some justification in tradition (see p. 145).

The following dates are mainly those of Driver, with the inclusion of those of Ussher (U), Skinner (S), etc. Dates fixed independently by Assyrian evidence are in square brackets.

- B.C.
- c. 2100 Abraham, 1996-1821 (U); real biblical date 2111-2036.
 - c. 1230 The Exodus, 1491 (U).
 - c. 1025 Saul, 1099 (U).
 - c. 1010 David, 1056 (U).
 - c. 970 Solomon, 1017 (U).
 - c. 933 Separation of Judah and Israel, 977 (U).
 - 876 Ahab, 918 (U).
 - [854 Ahab at battle of Karkar.]
 - 843 Jehu (S).
 - [842 Jehu's tribute to Assyria.]
 - 797 Amaziah, 798 (S), 790 (O. C. Whitehouse).
 - 783 Jeroboam II, 785 (S, Whitehouse).
 - 779 Uzziah.
 - 743 Menahem, 745 (S).
 - [738 Menahem pays tribute to Tiglath-pileser III.]
 - 736 Ahaz, 735 (S).
 - 728 Hezekiah, 726 (U), 725 (Robertson Smith), 720 (S, H. P. Smith),
715 (Hezekiah's sole reign; 726-715, Hezekiah and Ahaz;
Whitehouse).
 - [722 Fall of Samaria.]
 - [701 Sennacherib's campaign against Phoenicia, Palestine and Philistia.]
 - 639 Josiah, 641 (U), 640 (H. P. Smith), 637 (S).
 - [605 Battle of Carchemish.]
 - 597 First captivity, 599 (U).
 - 586 Fall of Jerusalem, 588 (U), 587 (S).
 - 561 Release of Jehoiachin.
 - 538 Capture of Babylon; edict of Cyrus, 536 (U).
 - 516 Completion of Second Temple.
 - 458 Return of Exiles under Ezra, seventh year of Artaxerxes.
 - 445 First Visit of Nehemiah to Jerusalem.
 - 432 Second visit of Nehemiah (ch. xiii, 6), 434 (U).

III. EGYPTIAN CHRONOLOGY

The chronology of ancient Egyptian history depends largely upon that of Babylonia. For Egypt we have nothing corresponding to the regular chronology of the eponymous *limmu*-officials, and the Egyptians never had an era continuously used. There occurs, indeed, 'the year 400 of Nubti' on a monument of Ramses II, which incidentally dates the Hyksos period to 400 years before his time; but this instance is isolated. As a rule, the Egyptians only mention such and such a year of King X. In early times they, like the Babylonians, merely quoted a year as that in which some particular event occurred. Later, they reckoned by the fiscal numberings that took place every two years, in connexion with the festival of Horus. As time went on these records were combined into regnal annals, engraved on monumental

stelae set up under the Vth Dynasty. Fragments of these have been discovered in modern days. The famous Palermo Stele is one of them. Scrappy as they are, these fragments are invaluable, because they give us hints of the approximate lengths of the reigns of some of the kings from the Ist to the Vth Dynasty.

It was the habit of the kings of the XIIth Dynasty to associate their sons with them on the throne; and this custom, combined with the fact that the regnal year is more frequently mentioned on monuments of this period than of any other, supplies a useful check on chronology. When we know that the thirtieth year of Amenemhet I was also the tenth of his son Senusret (Sesostris) I, and that the forty-fifth of Senusret was also the third of Amenemhet II, and so on, we can reconstruct the regnal years of the dynasty with considerable accuracy. This custom was revived under the XXIInd Dynasty. The Turin Papyrus of Kings, compiled under the XIXth Dynasty, gives the duration of the reigns (sometimes with the odd months and days), but the kings to which they refer cannot always be identified. This document has to be used with caution because it was garbled by copyists. There is a notable instance of a mistake in the regnal years which the papyrus assigns to Pepi I of the VIth Dynasty. He apparently reigned 50 years, but here he is credited with only 20. Manetho, the Ptolemaic historiographer, gives him fifty-three, which is likely enough. As for Manetho, originally his dates were probably trustworthy; but his text has been so terribly mangled by copyists that it would be most unsafe to trust its data unless they are confirmed by the Turin Papyrus or by monumental evidence. The regnal years of a few kings, who are historical persons, given by Herodotus and Diodorus are of little value.

So much for the direct sources. In order to compile a definite list of the probable lengths of the reigns, we have to fall back very largely upon the study of the monuments, checked by synchronisms with Mesopotamian history. These synchronisms are based ultimately on the *limmu*-lists and the succession-lists of the Mesopotamian kings. Thus the known date of Shalmaneser I of Assyria (p. 153 sq.) fixes approximately that of his Egyptian contemporary Ramses II and other kings (e.g. Kadashman-turgu of Babylonia), and also that of his great-great-grandfather, Ashur-uballit, who was contemporary with Amenhotep IV (Ikhnaton).

Astronomical evidence has also been successfully used in connexion with data derived from Mesopotamia. Eclipses were not noticed with any particular interest in Egypt. It is the observation not of eclipses but of the heliacal risings of Sirius that helps our

chronological enquiries. The Egyptians had discovered the true length of the solar year from their observations of the heliacal rising (that is, the latest visible rising before sunrise) of the star Sirius, which they called Sothis. This civil year consisted of 365 days ($360 + 5$ epagomenal). They did not intercalate an additional day every four years. The necessity of this intercalation may have been known to the later Egyptians, but it was never officially recognized, probably on account of a religious conservatism, like that which preserves the Julian calendar in Russia and Greece. Hence the months lost all relations to the seasons, and if the heliacal rising of Sirius fell on the first day of the first month, say, in 4241 B.C., it would fall in the middle of the year at the end of 730 years (in 3511 B.C.), and would not coincide again with the first day of the first month till 2781 B.C., when 1460 years had been completed. This interval of 1460 years, due to the defects of the Egyptian calendar, is known as the Sothic cycle. It was only used for regulating the calendar, never for dating events.

Now, we know that a new Sothic cycle began in A.D. 139 (or 143). Theon, the mathematician of Alexandria, calls the preceding cycle, which must have begun in 1321 B.C. (or 1317), 'the epoch of Menophres.' The 'throne-name' of Ramses I, who succeeded Harmhab about 1321 B.C., was Menpehre. His date is known because his predecessor dated the years of his reign from the death of Amenhotep III, the father of Ikhnaton (whose reign is ignored on account of his religious heresy), and 'reigned' at least 59 years, 1380–1321 B.C. Thus 1321 B.C. was the first year of a Sothic cycle, and the evidence fits in well. The two preceding cycles will have begun in 2778 or 2781 B.C. and 4238 or 4241 B.C., and in one of these years the cycle was instituted (p. 248).

If we find that the heliacal rising of Sirius is noted in an Egyptian document as falling in a certain month of a certain year in the reign of a certain king, it would seem that by calculating the loss of days implied we could discover the year B.C. to which the given year corresponds. On this principle, by means of a statement in a papyrus found at Kahun, that Sothis rose heliacally on the first of the month Pharmouthi in the seventh year of Senusret III, it has been computed that this year was 1882 (1876) or 1876 (1872) B.C., while from the same data another computer has arrived at 1945 B.C. But there are many considerations which militate against an unreserved acceptance of either of these dates, in the present state of our knowledge. If the former date were accepted, the end of the XIIth Dynasty would fall in 1788 B.C. But it will be admitted by all who have studied the material for the history of the

time that to allow only two centuries for the period between Dynasties XII and XVIII is difficult. If there are resemblances in culture between the XIIth and the early reigns of the XVIIIth Dynasty which argue a comparative proximity in time, there are, on the other hand, differences which cannot be accounted for if the distance is to be measured by no more than two hundred years. The XIIth Dynasty itself lasted for two centuries: are the changes observable during its continuance in any way comparable to those which had come about between its termination and the rise of the XVIIIth? The answer can only be a decided negative. Moreover, it seems impossible to find room in two centuries for the two dynasties of the Hyksos or 'Shepherd-kings,' preceding the XVIIIth Dynasty, some of whom seem to have had very long reigns and to have ruled the whole land (so that they cannot have been contemporaneous with other kings ruling in the south whose names we know), as well as for the long XIIIth Dynasty that preceded them, some of whose kings also reigned long and ruled the whole country.

An attempt has been made to cut this Gordian knot by pushing the XIIth Dynasty back a whole Sothic period of 1460 years, and assuming the true date of Senusret III to be about 3330 B.C. This seems an impossible solution. For though we might find some support for it in the long periods assigned by Manetho to the dynasties between the XIIth and the XVIIIth, 1600 years is far too long a period to be compatible with the resemblances between the Middle Kingdom and the beginning of the New Kingdom, and is far longer than our material demands. Were the Sothic date unknown, our evidence would not require more than 400 or at most 500 years between the two dynasties (see also p. 303 *n.*).

In the present writer's view, there must have been some mistake in the original observation of the star (if not in the modern calculation of the date); or possibly some change in the calendar, unknown to us, was introduced between the time of Senusret III and the beginning of Dynasty XVIII. Until the astronomical date is confirmed by another recorded observation in another reign, we are not justified in assuming that the XIIth Dynasty ended so late as 1788 B.C., or even 70 years earlier. Provisionally it would seem best to assume the round date 2000 B.C. for the end of Dynasty XII. This would satisfy all the requirements of our other knowledge. But it must be borne in mind that the majority of writers accept the later date which it seems difficult to reconcile with the facts (see p. 315 *sq.*).

If any change occurred which would invalidate the accuracy of

the computation—some failure of record, perhaps, consequent on the Hyksos invasion and resulting anarchy—it must have occurred before the rise of the XVIIIth Dynasty. This is certain from the fact that the dates of certain new-year festivals which were celebrated on certain days of the month in certain years of the kings Thutmose III and Amenhotep I can, by computing back from the epoch of Menophres, be fixed to the years 1474 (or 1470) and 1550 (or 1546) B.C. And from what we know of the lives of the kings of Dynasty XVIII and of the details of the history of the time, we can see that these dates correspond to what a dead reckoning from the time of Ramses I would demand. Computing back from Amenhotep I, we find that Amosis, the founder of the dynasty, must have ascended the throne about 1580 B.C. This, in the present writer's opinion, is the earliest date for an Egyptian king of which we can be absolutely certain within the margin of a few years either way.

Taking the hypothetical date of (about) 2000 B.C. for the end of Dynasty XII and working back, we reckon up the regnal years of the kings of this dynasty as to which we have clearly seen that we are very fully informed. By this means we are able to arrive at (about) 2375 B.C. for the beginning of Dynasty XI.

At this point we reach the second 'dark age' that meets us in a regress through Egyptian history, the period intervening between the Old and the Middle Kingdom. There were eighteen kings of Dynasties IX and X, namely the Heracleopolites, of whom the latest were contemporaneous with the earlier kings of Dynasty XI. We do not know whether they were also contemporaries of the later Memphite kings of Dynasties VII and VIII. The official Egyptian lists recognized as legitimate the kings of Dynasties VII and VIII and the later kings of Dynasty XI, but did not recognize the Heracleopolites. Thus it is uncertain whether we are to suppose that the last king of Dynasty VIII immediately preceded, in the north, the king of Dynasty XI who united the two kingdoms under the Theban sceptre (Nebhapatre), or that a number of Heracleopolites intervened between them. The Turin Papyrus of kings appears to count the sum of the years of the kings from Dynasty I to Dynasties VII and VIII as 955. If the Heracleopolites never ruled over the whole country but were contemporaneous with the Memphites, then, reckoning 955 years from Nebhapatre, whose reign probably began about 2290 B.C., we shall get (about) 3200 B.C. as the date of Menes, the unifier of Egypt and the founder of the monarchy.

But it is more probable that several of the Heracleopolite kings

did rule over all Egypt; and moreover we have to account for the degeneration of art and culture which is apparent under Dynasty XI as compared with Dynasty VI, a fact which points to a considerable period of anarchy and possibly foreign invasion (see below, p. 295 *sq.*). We can hardly assume less than one century of decadence between Dynasties VI and XI; on the other hand, not more than two, since in many ways the two ages approximate very closely, much more closely than Dynasties XII and XVIII. Moreover, we have to allow for the kings of Dynasties VII and VIII, the last of whom were possibly contemporary with the first Heracléopolites. Thus we come to 2600 (less preferably 2500) B.C. as the latest probable date for the end of the VIth Dynasty.

Now if we reckon the 955 years of the Turin Papyrus from 2400 B.C. (as the probable date of the end of Dynasty VIII), we get 3355 B.C. as the date of Menes, which nearly agrees with that adopted by some high authorities. But the 955 years of the Papyrus need not be taken as final, for mistakes were made by the copyists, *e.g.* in the case of King Pepi I. If, then, we combine the information supplied by the Papyrus with that available from other sources and a dead reckoning of the probable lengths of the reigns, derived from a study of the monuments, we find that very nearly 1000 years must have elapsed from the founding of the monarchy to the end of Dynasty VI. Thus we arrive at 3500 B.C. as an approximate date for Menes. This agrees with the calculation of those who hold the later date of the XIIth Dynasty, that an interval of roughly 1500 years separated Dynasty I from Dynasty XII. Our argument puts each of these dynasties about two centuries earlier.

The bold suggestion has been made that Menes, the founder of the Egyptian monarchy, is none other than Manium or Mannu-dannu, king of 'Magan,' who is mentioned by Naram-Sin, the early Semitic king of Babylonia (*cf.* p. 415 *sq.*). Now the Babylonian king Nabonidus states that Naram-Sin reigned 3200 years before his own time, that is, about 3750 B.C. (above, p. 155 *sq.*). As there seems to be a historical blank between this date and the period of Gudea, patesi of Lagash, who certainly reigned not long before 2500 B.C., and as such a remote date for a Semitic king seems inherently improbable (seeing that Sumerians were still reigning in Babylonia after Gudea's time), it has of later years generally been supposed that Nabonidus made a mistake of a round thousand and meant to say 2200, thus making Naram-Sin's date 2750 B.C., which is far more probable. Accordingly, the suggestion can be maintained only if we bring down the date of Menes from the minimum of

3500 B.C., which seems to be demanded, to 3000 B.C. But it is surely impossible to assign such a late date to the Ist Dynasty, and if it is held that Magan is Egypt and Manium is Menes, we must admit that the actual figures of Nabonidus for the date of Naram-Sin are correct and that Menes reigned about 3750 B.C. This is quite as probable as the minimum date we have postulated, 3500 B.C. But the gap of 1200 years between Naram-Sin and Gudea would still remain to be explained. Moreover, Mannu or Manium was a usual Semitic name in Naram-Sin's time; and although Magan may conceivably be the western coast of the Red Sea, and so Egypt in a sense, it is not certain that the land of Melukhkha, which is often mentioned along with Magan and certainly meant Ethiopia in later times, had the same signification in the age of Naram-Sin (see p. 416). The assignation of the name to Etkiopia two thousand years later may have been due to faulty antiquarianism. Therefore, with our present knowledge, we cannot claim 3750 B.C. as the date of Menes on the ground that he was contemporary with Naram-Sin, though otherwise the date is probable enough.

If the Sothic cycle was first observed in 2781 B.C. this event would, on our chronological scheme, have taken place under the Vth Dynasty. But it is highly probable that the cycle, and quite certain that the calendar to which it was applied, are both much older. The civil year of $360 + 5$ days is mentioned in the 'Pyramid Texts,' inscribed under the Vth and VIth Dynasties, but in reality far older. And under the IVth Dynasty we hear of two New Year Days, 'the First of the Year,' which apparently relates to the civil calendar, and the 'Opening of the Year,' which is connected with the Sothic year. It is then obvious that the civil calendar was established and its relation to the Sothic year known earlier than the IVth Dynasty. *Either*, then, the date of the IVth Dynasty, and of the mention of the civil calendar with its epagomenal days under the Vth, is later than 2781 B.C., which is hardly possible; *or* the Egyptian civil calendar was introduced in 4241 B.C., or another Sothic cycle earlier. 4241 B.C., in the times before the foundation of the united monarchy, is the more probable date, and, if it is right, it is the earliest that we know in Egyptian history.

To return to the starting point from which we worked back. Ramses II was reigning about 1260 B.C. and his reign can be fixed with fair accuracy to 1300–1234 B.C., by means of dead reckoning and other evidence. After him the principal synchronism is that between Shishak (Sheshonk), Jeroboam of Israel, and Rehoboam of Judah. This date has been fixed, on the authority of the Assyrian *limmu*-lists and the biblical evidence, to the neighbourhood of 930

B.C., and the reign of Shishak may fairly be assigned to 947-925 B.C. After this, we enter the accurately dated domain of Assyrian history, which certifies our Egyptian dates down to the seventh century when the list of *limmi* ceases, but not before we are able to date Psammetichus I to 651-610 B.C. After him we have the Greek historians to guide us.

The following chronological framework has thus been established; for the sake of comparison some dates maintained by other authorities are inserted, *viz.* Breasted (B) and Meyer (M).

B.C.	
4241 (?)	Institution of the Calendar(?). Beginning of the First Sothic Cycle.
3500 (?)	Beginning of the Old Kingdom; Dynasty I. 3400 (B), 3315 (M).
3050 (?)	Approximate date of the Great Pyramid (Dynasty IV).
2781	Beginning of the Second Sothic Cycle.
2600 (?)	End of Dynasty VI. 2475 (B).
2400 (?)	End of the Old Kingdom; Dynasty VIII. 2445 (B).
2375 (?)	Beginning of the Middle Kingdom; Dynasty XI. 2160 (M).
2275 (?)	Reunion of Egypt under Nebhapatre.
2212 (?)	Beginning of Dynasty XII. 2000 (B, M).
2000 (?)	End of Dynasty XII. 1788 (B, M).
c. 1650	Hyksos Kings reigning.
c. 1580	End of Middle Kingdom. Beginning of New Kingdom; Dynasty XVIII.
1550	Amenhotep I reigning (c. 1559-1530)
1450	Thutmose III reigning (c. 1501-1447).
c. 1380	End of reign of Amenhotep III and accession of Ikhnaton (c. 1380-1362).
1321	Beginning of the Third Sothic Cycle. First year of Ramses I (Menophres). 1315 (B).
1250	Ramses II reigning (c. 1300-1234; 1292-1225 B); Dynasty XIX.
930	Shishak (Sheshonk I) reigning (c. 947-925); Dynasty XXII.
651-610	Reign of Psammetichus I (663-609 B); Dynasty XXVI.

IV. PREHISTORIC GREECE

The chronology of prehistoric Greece is naturally far from certain although through connexions with Egypt certain general dates can be given. For the present everything must be based on the archaeological evidence till the clay tablets and other inscribed objects found in Crete and on the mainland of Greece can be read and interpreted. So many surprising revelations about the great prehistoric civilization of Greece, of which Homer is the echo, have come to light since Schliemann first began the exploration of Mycenae in 1876, that it would not greatly astonish us if some fortunate excavator at Cnossus, or some other rich site, were to

find the remains of royal and diplomatic correspondence like that of Tell el-Amarna. Till then, however, the potsherds and other archaeological finds must be the hieroglyphs from which history has to be pieced together, for it is a truism that in a prehistoric age archaeology is history.

Archaeology divides prehistoric Greece into the four great regions: Crete (Minoan), the Cyclades (Cycladic), the Peloponnese and south-eastern Greece (Helladic), Thessaly and north Greece (Thessalian). Systems of dating the objects found have, as explained in the last chapter, been drawn up, and it is consequently easy to express the date of a characteristic object from the Cyclades in terms of the Minoan or of the Helladic series¹.

These archaeological dates are purely relative, and naturally the series slide up or down in relation to one another as new discoveries are made. But the main lines have stood the test of several years and the general correspondences may be regarded as fixed. The difficulty comes when we attempt to fit these archaeological dates into any scheme of world chronology or to fit them on to the history of another country outside Greece. Asia Minor is still unexplored and the connexions through Macedonia and Thrace between Greece proper and the Balkan countries are not yet known though some indications are already to hand.

The one neighbouring land where there is a fairly stable chronological system based on written documents and inscriptions is Egypt. Between Egypt and prehistoric Greece, especially Crete and Mycenae, there was intercourse as shown by Egyptian objects found in Crete and Mycenae, and by Cretan and Mycenaean objects found in Egypt. The relations between Crete and Egypt in the first (Early Minoan) period are indistinct, but there is clear evidence of contact between the two countries. The Early Minoan ossuaries, or receptacles for human bones, found in the Messara plain, contained some flakes of pale-grey, transparent obsidian, and fragments of the same kind of obsidian have been picked up at Cnossus. The obsidian usually found in Crete is the well-known black, opaque Melian obsidian, while the pale-grey transparent variety is found in Egyptian and Hittite sites and comes from African and Anatolian sources². In the same ossuaries hundreds of small stone bowls were found, which, though of local fabric and material, are analogous to the stone vessels of the first six Egyptian dynasties. A large number of beautiful stone bowls of the same date and general character, which have been found at Mochlos and

¹ See Chap. III, pp. 139 sqq.; and below Chap. XVII, on early Aegean civilization.

² Or possibly the Dodecanese.

at Cnossus, were genuine Egyptian vases in Syenite and diorite assigned to the late predynastic period and to the IInd and IVth Dynasties. At Cnossus, at Pyrgus not far to the north-east, and in the cave at Arkalochori, were vases of the Early Minoan period which are similar to some found by Petrie in Ist Dynasty surroundings at Abydos. Another strong point of contact is formed by the Early Minoan seals in stone and ivory, especially those from the Messara ossuaries mentioned above, which by their style and their devices are parallel to Egyptian seals of the first six dynasties. Button seals of a sixth dynasty type are especially to be noted. Again, stone and marble palettes of Early Minoan and Early Cycladic times resemble analogous palettes found in early dynastic tombs in Egypt.

Generally speaking, therefore, the Early Minoan period may be said to have begun before the middle of the fourth millennium and to have ended about 2250 B.C. This dating is only approximate, and of course depends upon that assigned to the XIIth Dynasty. It is consequently complicated by the problems peculiar to early Egyptian chronology. Further, although the succession of pottery styles and the development of the other classes of objects mentioned are fairly clear within the Early Minoan period, it is impossible to say, except very approximately, what particular style in the Early Minoan period corresponds to any given Egyptian dynasty. The excavation of a well-stratified Early Minoan site would do much to clear up some of these points. All detailed study, however, of the evidence so far available, and daily increasing, brings out more and more the close connexion between Crete and Egypt in those remote times.

In the Middle Minoan period the intercourse between Crete and Egypt so far revealed is clear and reciprocal. At Kahun were found Middle Minoan potsherds in a XIIth Dynasty context (time of Senusret II), and at Abydos a tomb of the latter half of the XIIth Dynasty contained a Middle Minoan II polychrome vase. Meanwhile, at Cnossus have been unearthed in Middle Minoan strata a diorite statuette of one Ab-nub-mes-wazet-user of the Aphroditopolite nome, dating from the XIIth or early XIIIth Dynasty, and the lid of an alabastron bearing the cartouche of the Hyksos king, Khian (of the XVIIth cent. B.C.?). Another monument of Khian, a black granite lion in the British Museum, has been found at Baghdad, and suggests interesting speculations about the influence of this king of whom unfortunately all too little is known from the Egyptian records (p. 313). It nevertheless seems clear that the first two phases of the Middle

Minoan age are contemporaneous with the XIIth Egyptian Dynasty and are therefore to be dated towards the close of the third millennium. But here again this date depends on the view taken of Egyptian chronology, as to the expansion or compression of the intervals between the VIth and XIIth and between the XIIth and XVIIIth dynasties (see pp. 169 *sqq.*, 316).

Many vases, dating from the First Late Minoan period, have been found in Egypt, although not all are of Cretan fabric; also a scarab of the later XVIIIth Dynasty in one of the tombs of the Cnossian cemetery of the third phase of this period. In the frescoes on the walls of the tombs of Senmut and Rekhmire, great officials who administered Egypt under Queen Hatshepsut and Thutmose III (c. 1501-1447), appear Keftian and other foreigners bringing offerings consisting of vessels of precious metals which are in shape unmistakably the same as characteristic Minoan vase types—cups like the fine gold cup from Vaphio (a type very common in pottery of the Late Minoan I period) and rhytons (fillers)—similar to the fine steatite specimens from Phaestus and Hagia Triada in Crete. Some also carry copper ingots, such as have been found at Phaestus. Who the Keftians were is for Egyptologists to decide, but it is remarkable that the Keftian bearers of tribute in the Egyptian tombs have a considerable likeness, both in their appearance and in the style of the frescoes themselves, to the cup-bearer of the Cnossus fresco. The general style of the XVIIIth Dynasty frescoes from Thebes and Tell el-Amarna also shows artistic kinship with the frescoes of Cnossus and Phaestus, and is again reflected in an early group of frescoes from Mycenae and Tiryns. Through this Cretan evidence we can correlate the Late Minoan period with the XVIIIth Dynasty, and their parallelism is confirmed by the evidence from Mycenae and elsewhere.

At Mycenae itself several Egyptian objects have been brought to light. We have a monkey in blue vitreous paste with the cartouche of Amenhotep II, a faience plaque and a genuine Egyptian lotos-bowl with that of Amenhotep III (though unfortunately we do not know the context in which these were found), and a scarab of Queen Tiy from a chamber tomb of the Third Late Helladic period. This evidence is again supported by a scarab of Amenhotep III from Ialyssos in Rhodes and one of Queen Tiy from Cyprus, both found in tombs which contained vases of the Third Late Minoan period. At the same time, vases of the typical Mycenaean style (Late Minoan III, or rather Late Helladic III, for the vases are Mycenaean not Cretan), have been found in quantities in Egypt, especially in the ruins of Ikhnaton's palace at

Tell el-Amarna which thus gives a fixed date (about 1380 B.C.) for this style of vase-painting. They are found, too, in the foreign settlement at Gurob, and in many other sites in association with XIXth and XXth Dynasty objects. Further, in the tomb of Ramses III (XXth Dynasty) stirrup vases of the typical Mycenaean shape in gold and copper are represented, and Egyptian imitations of the same vase type and of rhytons in blue faience, which date from the XIXth Dynasty, are now in the British Museum. The archaeological evidence all points to the fact that the greatest and closest relation between prehistoric Greece and Egypt was during the XVIIIth, XIXth and XXth Dynasties (c. 1580-1100 B.C.), a period which may be treated as generally contemporaneous with the Late Minoan and Late Helladic ages.

Here again other considerations occur. It was in these times that Egypt was in close contact with, and in fact often invaded by, the peoples from the Great Green Sea, among whom are mentioned the Danauna and the Akaiuasha, long since identified as 'Danaoi' and 'Achaeans.' The Danauna possibly appear in a letter of Abimilki of Tyre to Amenhotep (Tell el-Amarna, No. 151); later they reappear in the reign of Ramses III as threatening Egypt with the Libyans, Pulesati (Philistines), and certain other tribes that cannot be identified. It is possible that the Danauna are the Danaoi, and it may be more than a coincidence that their appearance in Egypt at this date (shortly after 1200 B.C.), is the time when 'the isles were restless,' and Danaoi under Agamemnon were besieging Troy. The Akaiuasha formed part of the horde of peoples who invaded the Delta in the days of Merneptah some thirty years earlier and were principally, it seems, from Asia Minor. If the Akaiuasha were Achaeans and the Danauna Danaoi, it is worth noting that these raids on Egypt by peoples from Greek lands took place in the Third Late Helladic period, which was the time of the greatest diffusion of Mycenaean culture.

We shall see later that the colonization of Cyprus by Achaeans may be assigned, following the traditional dates, to 1176 B.C., and this island, as so often in history, would have formed an excellent base of operations for seafaring raiders from Asia Minor and the Aegean to harry the Nile basin. Egypt may have been to the seakings of Crete and Mycenae what the Spanish Main was to Elizabethan England, or the British Isles and neighbouring coasts to the Northmen. In this latter case the settlement in Normandy would find a parallel in that of the Philistines (Pulesati) on the Palestinian coast, and perhaps also in that of the Mycenaean or

Cretan elements who seem to be included among the 'Phoenicians' of the Syrian coast.

Accordingly, the Greek tradition of the prominence of 'Red Men' (Φοίνικες) in prehistoric times in Greece, and their introduction of the alphabet, and other signs of civilization, could be taken as a reference to the Cretans who, as we know, were the first to develop a script in the Aegean basin and to introduce it on the mainland of Greece. Similarly, too, the tales of Cadmus, Cecrops, Danaus and other foreigners, as coming from Phoenicia, or Egypt, and settling in Greece as the bearers of a higher type of civilization, could be again the echo of the gradual penetration and, partly too, colonization by 'Minoan' (as we may call them) chiefs and traders of parts of the Greek mainland. The Thucydidean tradition of Minos the thalassocrat, the tales of the settlement of this island and of that by some son of Minos, of Theseus and the human tribute exacted from Athens, and the frequent occurrence of the place-name Minoa, all point in the same direction, namely that civilization in the Aegean area began in Crete and spread northwards. When all this took place cannot yet be dated with even approximate accuracy.

Greek traditional dates—commonly based on genealogies—for the reign of Minos, the Trojan War, and other events all more or less legendary, do not entirely disagree with the dates to be deduced from Egyptian chronology through the medium of archaeological comparisons. One of the most important Greek documents giving traditional dates is the *Marmor Parium*, an inscription, found in Paros and now in Oxford, which gives, so far as it is preserved, a series of dates (based upon computation) for the principal events of Greek history both of heroic and of historic times. It dates from 264–3 B.C. and differs from other authorities in some of its figures, placing, for instance, the Fall of Troy at 1209–8 B.C. The works of Eratosthenes and Apollodorus as preserved in Eusebius, Suidas, and other late writers, also give important help, though naturally their authority is secondhand. Other traditional dates are given by Thucydides and Herodotus, who, with Diodorus and the *Marmor Parium*, are the most trustworthy sources. The royal genealogies given by Pausanias and others are of some assistance, though there is some ground for suspecting that they have been rationalized.

From a comparison of these sources, then, we might hazard the following approximate chronology. We might date Cecrops between 1582 and 1556, Cadmus to 1313, Danaus to 1466, Pelops to 1283, Minos to 1229, while the Trojan War may probably be

dated to 1192-83, the Achaean settlement in Cyprus to 1176, the Thessalian migration to 1124, and place to about 1104 the great Dorian invasion which really marks the end of the prehistoric age and of the marvellous Bronze-Age civilization of Greece and the beginning of the Iron Age. This would mean that, by the archaeological dates determined by the Egyptian evidence, the House of Pelops would have reigned at Mycenae during the Third Late Helladic period which was, as the recent excavations have shown, the time when Mycenae was at the very climax of its wealth and power.

Following these lines we can observe a certain correspondence between Greek legend and tradition and the archaeological dates derived from Egypt; but as the traditions are naturally enough vague and often contradictory, the simple archaeological evidence should be preferred in any case of doubt, and there are unfortunately only too many. For instance, in transferring dates of the Minoan series into the Helladic series we are faced with the fundamental difficulty that there is only a general correspondence between the three series (Minoan, Cycladic and Helladic), each with its three periods (Early, Middle and Late). The Early periods at the beginning of the Bronze Age correspond, because it is clear from a comparison of the archaeological finds that these three areas were inhabited by peoples very much akin in culture, and at approximately about the same stage of progress towards civilization, though, through the impulse and perhaps colonization from early dynastic Egypt, Crete rapidly drew ahead of the other two. Beyond this statement it is impossible to go at present, nor can we date the Early Cycladic and Early Helladic periods by the Egyptian dynasties through the medium of Crete.

In the Middle period we know from the Cretan polychrome ware found at Phylakopi in Melos that the Middle Cycladic and Middle Minoan periods were contemporary; but there is no certain connexion between the mainland and Crete at this time. There is, however, a class of pottery which is typical of the Middle Helladic period, and has been found at Phylakopi in the same stratum as the Cretan ware. We are thus enabled to correlate Middle Helladic and Middle Minoan periods, but it is impossible to date one definitely in terms of the other in the absence of direct contacts. For the late periods, with the spread of the Minoan and Mycenaean civilization all over the Greek area, and the great improvement in trade and communications, which seems to have marked this age, one can say with far less chance of inaccuracy that the first Late Helladic period is to all intents and purposes contemporaneous with Late Minoan I. The progress of civilization to the final climax of

the Bronze Age and the establishment, apparently, of big centres of political power (for instance, at Cnossus and Mycenae) dominant over wide spheres of influence, produced a far greater unity in the culture of the different areas, and so give a surer basis for any attempt at chronology especially when, as we have seen, the contacts with Egypt at this time are so strong and numerous.

When we turn to the remaining area, Thessaly, which is divided into four periods, we find that here there are serious difficulties, for relations between this region and the south seem to have been few. At Corinth Thessalian pottery of the Second period has been found underlying pottery of the later Early Helladic period, at Orchomenus and Lianokladi Early Helladic pottery has been found above pottery of the First and Second Thessalian periods, and at Tsani Magoula in Thessaly some Early Helladic vases have been found in a stratum placed at the end of the Second period. The only other links are provided by pottery of Late Helladic II and III periods found in Thessaly at the end of the Fourth period and by the discovery in strata only slightly anterior of a ware typical of the Middle Helladic age, which occurs however as late as Late Helladic II. From this one can say that the First Thessalian period is older than the Early Helladic, while the Second Thessalian period is partly contemporary with the Early Helladic, and the later part of the Fourth period is parallel with the Late Helladic age. More than this the archaeological evidence, so far available, will not bear. It is therefore impossible at present to attempt to represent the Thessalian series in terms of any one of the others with any approach to accuracy. Further careful excavation is necessary. It is in fact only by careful excavation by well-trained observers, not to mention the proper study and publication of all material found in the past—for full justice has not yet been done to many excavations in this way—no less than in the future that we can hope for further light on the chronology of prehistoric Greece.

For a comparative table of periods, see pp. 656 *sqq.*

LIST OF ABBREVIATIONS

Abh.	Abhandlungen.
Abh. K.M.	Abhandlungen für die Kunde des Morgenlandes.
A.J.A.	American Journal of Archaeology.
A.J.Ph.	American Journal of Philology.
A.J.S.L.	American Journal of Semitic Languages and Literatures.
A.S.A.E.	Annales du Service des antiquités de l'Égypte.
Ath. Mitt.	Mittheilungen des deutschen arch. Inst., Athenische Abtheilung.
B. z. Ass.	Beiträge zur Assyriologie und semitischen Sprachwissenschaft.
B.C.H.	Bulletin de Correspondance hellénique.
B.I.C.	Bulletin de l'Institut français d'archéologie orientale au Caire.
Bay. S.B.	Sitzungsberichte d. bayerischen Akad. d. Wissenschaften.
Berl. S.B.	Sitzungsberichte d. preuss. Akad. d. Wissenschaften zu Berlin.
Biblica	Biblica. Commentarii editi a Pontificio Instituto Biblico, Rome.
B.S.A.	Annual of the British School at Athens.
B.S.R.	Papers of the British School at Rome.
Bull. d. I.	Bullettino dell' Istituto.
C.I.G.	Corpus Inscriptionum Graecarum.
C.I.L.	Corpus Inscriptionum Latinarum.
C.I.S.	Corpus Inscriptionum Semiticarum.
C.J.	Classical Journal.
C.Q.	Classical Quarterly.
C.R.	Classical Review.
C.R. Ac. Inscr.	Comptes rendus de l'Académie des Inscriptions.
D.B.	Dictionary of the Bible (J. Hastings, Edinburgh, 1898).
E.Bi.	Encyclopaedia Biblica.
E.Brit.	Encyclopaedia Britannica. Ed. XI.
E.H.R.	English Historical Review.
E.R.E.	Encyclopaedia of Religion and Ethics.
Exp. T.	Expository Times.
Ἐφ. Ἀρχ.	Ἐφημερίς Ἀρχαιολογική.
F.H.G.	C. Müller, Fragmenta Historicorum Graecorum.
G.G.A.	Göttingsche Gelehrte Anzeigen.
Geogr. Z.	Geographische Zeitschrift.
Head H.N.	Head, Historia Numorum, 2nd Ed. 1912.
Herm.	Hermes.
I.G.F.	Indogermanische Forschungen.
J.A.	Journal Asiatique.
J.A.O.S.	Journal of the American Oriental Society
J.B.S.	Journal of Biblical Studies.
J.D.A.I.	Jahrbuch des deutschen archäologischen Instituts.
J.E.A.	Journal of Egyptian Archaeology.
J.H.S.	Journal of Hellenic Studies.
J. Man. E.O.S.	Journal of the Manchester Egyptian and Oriental Society.
J.R.A.I.	Journal of the Royal Anthropological Institute.
J.R.A.S.	Journal of the Royal Asiatic Society.
J.R.S.	Journal of Roman Studies.
J.S.O.R.	Journal of the Society of Oriental Research.

Klio	Klio (Beiträge zur alten Geschichte).
Liv. A.A.	Liverpool Annals of Archaeology.
M.B.B.A.	Monatsbericht der Berliner Akademie.
M.D.O.G.	Mittheilungen der deutschen Orient-Gesellschaft.
M.D.P.V.	Mittheilungen des deutschen Palästinavereins.
M.V.A.G.	Mittheilungen der vordrasiatischen Gesellschaft.
Mon. d. I.	Monumenti Antichi dell' Istituto.
N.J. Kl. Alt.	Neue Jahrbücher für das klassische Altertum.
N.J.P.	Neue Jahrbücher für Philologie.
N.S.A.	Notizie degli Scavi di Antichità (Atti d. r. Accad. dei Lincei).
Num. Chr.	Numismatic Chronicle.
Num. Z.	Numismatische Zeitschrift.
O.L.Z.	Orientalische Literaturzeitung.
P.E.F.	Palestine Exploration Fund.
Phil.	Philologus.
P.S.B.A.	Proceedings of the Society of Biblical Archaeology.
P.W.	Pauly-Wissowa, Real-Encyclopädie der klassischen Altertumswissenschaft.
Πρ.	Πρακτικά.
Q.S.	Quarterly Statement(s).
Rec. Trav.	Recueil de Travaux relatifs à la philologie et à l'archéologie égyptienne et assyrienne.
Rev. A.	Revue archéologique.
Rev. Ass.	Revue d'Assyriologie.
Rev. Bib.	Revue biblique internationale.
Rev. Eg.	Revue égyptologique.
Rev. E.G.	Revue des études grecques.
Rev. H.	Revue historique.
Rev. N.	Revue numismatique.
Rh. Mus.	Rheinisches Museum für Philologie.
Riv. Fil.	Rivista di Filologia.
Riv. N.O.	Rivista nuova orientale.
Röm. Mith.	Mittheilungen des deutschen arch. Inst., Römische Abtheilung.
R.V.	Revised Version.
R.V. mg.	Revised Version margin.
S.B.	Sitzungsberichte.
Syria.	Syria: Revue d'art oriental et d'archéologie.
T.S.B.A.	Transactions of the Society of Biblical Archaeology.
W.Z.K.M.	Wiener Zeitschrift für die Kunde des Morgenlandes.
Wien S.B.	Sitzungsberichte d. Akad. d. Wissenschaften in Wien.
Wien St.	Wiener Studien.
Z.A.	Zeitschrift für Assyriologie.
Z. Aeg.	Zeitschrift für ägyptische Sprache und Altertumskunde.
Z.A.T.W.	Zeitschrift für die alttestamentliche Wissenschaft.
Z.D.M.G.	Zeitschrift der deutschen morgenländischen Gesellschaft.
Z.D.P.V.	Zeitschrift des deutschen Palästina-Vereins.
Z.E.	Zeitschrift für Ethnologie.
Z.G. f. E.	Zeitschrift der Gesellschaft für Erdkunde.
Z.N.	Zeitschrift für Numismatik.

CHAPTER IV

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CHAPTER V

THE SEMITES

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I. SYNCHRONISTIC TABLE¹

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SYNCHRONISTIC TABLE: c. 5000—c. 3000 B.C.

B.C.	Egypt	Babylonia, Assyria	Aegean, Cyprus, etc.
5000		<i>Sumerians in Mesopotamia</i>	
4500		<i>Semitic dynasty at Kish</i> (? p. 365)	
4241 (or 4238)	<i>Calendar</i> introduced in Lower Egypt. First Sothic Cycle begins (pp. 168, 248) Dual kingdom in existence		
4000	Relations between Egypt, Syria and Mesopotamia		Beginning of Bronze Age in Crete, and <i>Early Minoan Period I</i> begins (Early Helladic I begins)
3500	<i>First Dynasty</i> Age of Narmer (? = Menes)	Third dynasty of Kish (computed at c. 3638 B.C.) Contemporary records begin	
3350	<i>Second Dynasty</i> (northern) Semitic type of names (p. 274 sq.)		
3200	<i>Third Dynasty</i> (southern) Zoser builds 'step-pyramid' of Sakkarah	Dynasty of Akshak (earliest approximately fixed date, 3200 B.C., in Sumerian history)	
	Snefru builds pyramids of Dahshur and Medum		Cedars of Lebanon imported by Egypt
3100	<i>Fourth Dynasty</i> Age of three Great Pyramids of Gizeh (Cheops, etc.) Copper and wheel-pottery in use	Ur-nina, first known ruler of Lagash (3100 B.C.) Fourth Dynasty of Kish (3089 B.C.)	<i>Early Minoan II</i> begins
3000	<i>Fifth Dynasty</i> (Heliopolitan usurpers) Prominence of Sun-worship	Eannatum of Lagash overthrows Kish. His Stele of Vultures	

¹ A few dates are added after 1580 B.C. for the sake of reference

SYNCHRONISTIC TABLE: c. 2900—c. 2600 B.C. 657

2900	Pyramid of Abusir	Urukagina of Lagash (social reformer, p. 387) Rise of Lugal-zaggisi (2897 B.C.), who claims to rule from Mediterranean to Persian Gulf	Copper Age in Cyprus begins
2870	Dedkere Isesi (2883–2855 B.C.). (Pro-verbs of Ptah-hotep— <i>according to a Middle Kingdom papyrus</i> , pp. 288, 348) Intercourse with Somaliland and Phoenicia	Sargon, Founder of SEMITIC KINGDOM OF ACADE. Conquests in Syria and (?) Asia Minor	(Troy: First Settlement, see p. 613.)
2800	Unis (2855–2825 B.C.). Pyramid texts of Sakkarah <i>Sixth Dynasty</i> (2825– B.C.) Pepi I (2795–2742 B.C.)	Naram-Sin defeats Manium of Magan (= Arabia? p. 415 sq.), 2795 B.C. His Stele of Victory	Palestine attacked by Pepi I
2781 (or 2778)	Second Sothic Cycle begins Pepi II (2738–2644 B.C.) Increased trade with Nubia Negro pressure northward	Shargalisharri subdues Amorites, 2737 B.C. (p. 420) War with Gutium Ur-Bau patesi of Lagash	(Chalcolithic age in Thessaly) (Early Helladic II)
2700	End of OLD KINGDOM First 'Intermediate Period' <i>Seventh to Tenth Dynasties</i> Asiatics invade Egypt (pp. 296, 344)	Inroad of Gutti on Sumer and Akkad Gudea of Lagash Intercourse with Magan, Melukhkha, Mount Amanus, etc. Utukhegal overthrows dynasty of Gutium and founds fifth dynasty of Erech (c. 2524–2474, see p. 434)	Early Minuan III begins
2600			

B.C.	Egypt	Babylonia, Assyria	Aegean, Cyprus, etc.
2500		[Ushpia and Kikia (Mitannian?) kings of Assyria] Dynasty of Ur <i>Sumerian Revival</i> , under Ur-Engur (author of Sumerian law code), 2474 B.C., and Dungi (2456 B.C.) Conquest of Elam, Amor, etc.	Cappadocia attached to Empire of Ur (?)
2400	MIDDLE KINGDOM <i>Eleventh Dynasty</i> (Theban), 2375-2212 B.C. (p. 169 sq.) Bronze Age	Bur-Sin (2398 B.C.) Zariku, king of Assyria, tributary to Sumer Gimil-Sin builds wall of Amor (2387 B.C.) Fall of dynasty of Ur: attacked by Amor and Elam Ishbi-girra, king of Isin (2357 B.C.). Rivalry of Isin and Larsa	(Early Helladic III)
2300	Nebhapetre (2290-2242 B.C.)	Lipit-isthar of Isin (2274-2264 B.C.), driven out by Amor (p. 476). Brief Sumerian revival Gungunum of Larsa (2264-2238 B.C.)	<i>Middle Minoan I</i> begins
2200	<i>Twelfth Dynasty</i> Amenemhet I (2212-2182 B.C.) Renascent of Art Nubia Egyptianized Prominence of god Amon Senusret I (2192-2147 B.C.)	<i>First Dynasty of BABYLON</i> Sumu-abum (2225 B.C.) Sumu-la-ilum (2211-2176 B.C.) Destruction of Kish Elamite invasion	Bronze Age (First Period) in Cyprus begins

		Conquest of S. Babylonia by the Elamite Kutur-mabuk 'father' of Amor Fall of Larsa (2167 B.C.) Rim-Sin, Elamite ruler of Larsa (2155- 2094 B.C.) Conquers Erech (2134 B.C.) and Isin (2125 B.C.) HAMMURABI (2123-2081 B.C.), retakes Erech and Isin (2117 B.C.); defeats Elam (2094 B.C.) and Rim-Sin; becomes king of Amor; extends his rule over Assyria (2087 B.C.); code (c. 2090 B.C.) Samsu-iluna (2080- B.C.) Decline of Babylonia	Building of Palace of Cnossus begins <i>Middle Minoan II</i> begins (Middle Helladic) (Bronze Age in Thessaly) Presumed age of Abraham (pp. 163-17, 225)
2100	Senusret II (2118-2099 B.C.) Beni-Hasan tombs (p. 228) Senusret III (2099-2061 B.C.) War in Palestine		
	Amenemhet III (2061-2013 B.C.)	Ilumailu (2070- B.C.) Ilumailu takes Nippur (c. 2052 B.C.) Amor attacks Babylonia (2045 B.C.) Revolt of Akkad (2044 B.C.)	(Troy: Second City destroyed, see p. 614)
2000	<i>Twelfth Dynasty</i> ends Second 'Intermediate Period,' including <i>Thirteenth to Seventeenth Dynasties</i>	Samsu-ditana (1956-1926 B.C.) Hittite raid on Akkad (1926 B.C.) End of <i>First Dynasty of Babylon</i>	Destruction of Palaces of Cnossus and Phaestus <i>Middle Minoan III</i> begins Cessation of direct intercourse of Crete with Egypt
1900	Hyksos invasion		
1800	Introduction of the horse into Egypt	Kassites under Gandash conquer Baby- lonia (1746 B.C.)	

SYNCHRONISTIC TABLE: c. 2200—c. 1800 B.C. 659*

B.C.	Egypt	Babylonia, Assyria	Aegean, Cyprus, etc.
1700		Beginning of KASSITE <i>Dynasty</i> (1746 B.C.)	
1600	War of liberation, led by Thebes, against the Hyksos The Hyksos expelled The NEW KINGDOM begins with the <i>Eighteenth Dynasty</i> Accession of Ahmose I (1580 B.C.)	End of the Sea-Country kings (1703 B.C.) Assyria overlord of the Semites of the Middle Euphrates (p. 468)	<i>Late Minoan I</i> begins (Late Helladic or Mycenaean I)
1500	Thutmose III (1501-1447 B.C.) Wars in Syria	Agum II (Kassite), 1561-1537 B.C.	Bronze Age (Second Period) in Cyprus <i>Late Minoan II</i> (Late Helladic II)
1400	Age of the Amarna Letters and Boghaz Keui tablets		Destruction of Palaces of Chossus and Phaestus <i>Late Minoan III</i> begins (Late Helladic III)
1300	<i>Nineteenth Dynasty</i> (c. 1350 B.C.) Beginning of Third Sothic Cycle (1321 B.C.)	Shalmaneser I (1276-1257 B.C.)	
1200	<i>Twentieth Dynasty</i>		Sixth City of Troy

LIST OF EGYPTIAN KINGS

II

SELECT LIST OF EGYPTIAN KINGS OF THE OLD AND MIDDLE KINGDOMS, c. 3500—1580 B.C.¹

Predynastic Kings of Lower Egypt	Predynastic Kings of Upper Egypt
..... Tiu Thesh Hsekiu Uaznar Ro

FIRST DYNASTY: c. 3500—3350 (?) B.C.

Historical	Traditional	Manetho
'Scorpion' Narmerza } Aha Men }	Meni	Mēnēs
Zer (? Khent) Atoti	{ Teti Atoti	Athōthis Ouenephēs
Za	Ata	Kenkenēs
Den (? Udimu) Semti	Hsapti	Ousaphais
Enezib Merpeba	Merbap	Miebis
Semerkhet Nekht	Shemsu	Semempsēs
Ka Sen	Kebh	Biēnekhēs

SECOND DYNASTY: c. 3350—3190 (?) B.C.

Historical	Traditional	Manetho
Hotepsekhemui	Buzau	Boēthos
Reneb	Kakau	Kaiekhōs
Neneter	Banentiru	Binōthris
Sekhemib Perenmaat } Peribsen }	Uaznas	[O]tlas
Senedi	Senedi	Sethenēs Khairēs
	Neferkere	Nepherkherēs
	Neferkesokari	Sesōkhris
	Huzefa	Khenerēs

¹ All the dates in this list must be regarded as provisional, and as followed by a query; see above, pp. 166–73, and Chaps. VII sq. It should be observed that they differ slightly from those of Breasted and the German School in the earlier dates assigned to the XIth–XIIIth Dynasties, and consequently to all that precede (pp. 169, 315). For fuller details see H. R. Hall, *The Ancient History of the Near East*, pp. 17 sqq., 120, 126, 134 sq., 148.

LIST OF EGYPTIAN KINGS

THIRD DYNASTY: *c.* 3190–3100 (?) B.C.

Historical		Traditional	Manetho
Khasekhem [Khasekhemui]	} Besh	Zazai [Bebi]	Necherōphes
Zoser		Zoser	Tosorthros
Sanekht		Nebka	{ Tyreis Mesōchris Sōyphis
		Zoserteti	Tosertasis
		Sezes	Achēs
Neferka		Neferkere	Kerpheres (<i>i.e.</i> Nephherkeres)
Snefru		Snefru	S[n]ēphouris

FOURTH DYNASTY: *c.* 3100–2965 (?) B.C.

Historical		Manetho	Herodotus and Diodorus
Sharu (?)	3100–3098	Sōris	
Khufu	3098–3075	Souphis	Cheops
Rededef	3075–3067	Ratoises	
Khafre	3067–3011	Souphis	Chephrēn, Chabryes
Menkaure	3011–2988	Mencherēs (Bicheris)	Mykerinos
Shepseskaf	2988–2970	Sebercherēs	
—	2970–2965	Thamphthis	

FIFTH DYNASTY: *c.* 2965–2825 (?) B.C.

Historical		Manetho
Userkaf	2965–2958	Ousercherēs
Sahure	2958–2946	Sephrēs
Neferirikere Kakau	2946–2936	Nephhercherēs
Neferefre Shepseskere	2936–2929	Sisirēs
Khaneferre	2929–2925	Cherēs
Neuserre An	2925–2891	Rathourēs
Menkauhor	2891–2883	Mencherēs
Dedkere Isesi	2883–2855	Tancherēs
Unis	2855–2825	Onnos

SIXTH DYNASTY: *c.* 2825–2631 (?) B.C.

Teti	} 2825–2795	Othoēs
Userkere Ati		
Merire Pepi I	2795–2742	Phios
Merenre Mehtimsaf I	2742–2738	Methesouphis
Neferkere Pepi II	2738–2644	Phiōps
Merenre Mehtimsaf II	2644–2643	Menthessouphis
Neterkere	} 2643–2631	Nitōkris
Menkere		

SEVENTH AND EIGHTH DYNASTIES (Traditional and Manethonian)

1 IST: DYNASTIES III—XIV

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NINTH AND TENTH DYNASTIES (Herakleopolite): *c.* 2500–2300 (?) B.C. (Chief Kings)

Historical	Manetho
Meriebre Ekhtai I (Khati)	Akhthoēs
Uohkere Ekhtai II	
Uazkere	
Merikere	

ELEVENTH DYNASTY (Theban): *c.* 2375–2212 (?) B.C.

Iniotef-‘o (Intef-‘o) I (Hor Uah-ankh)	2375	
Iniotef (Intef) II (Hor Nakhtnebtetpnefer)		
Mentuhotep I (Hor Sankhibtoui)		
Nebtoui		
Mentuhotep II		
Nebkhrure		
Nebhapetre		
Sankhkere Mentuhotep IV		
Mentuhotep III (Hor Neterhezet)	2290–2242	
Mentuhotep III (Hor Samtoui)		
	2242–2212	

TWELFTH DYNASTY (Theban): *c.* 2212–2000 (?) B.C.

Monuments, etc.		Manetho
Sehetepibre Amenemhet I	2212–2182	Ammenemēs
(Co-reg.)		
Kheperkere Senusret I	2192–2147	Sesonkhōsis
(Co-reg.)		
Nubkaure Amenemhet II	2150–2115	Ammenemēs
(Co-reg.)		
Khakheperre Senusret II	2115–2099	Sesōstris
Khakaure Senusret III	2099–2061	Lakharēs
Nemaatre Amenemhet III	2061–2013	Ammerēs (Lamaris)
(Iuibre Hor; co-reg.?)		
Maatkhrure Amenemhet IV	2013–2004	Ammenemēs
Sebeknefrure	2004–2000	Skemiophris

THIRTEENTH AND FOURTEENTH DYNASTIES (Chief Kings)

Khutouire Ugafa (Northern) <i>c.</i> 2000 (?)	
Sekhemkere Amenemhetsenbef	
Sankhibtoui Amenemhet-Intef-Amenemhet	
Sneferibre Senusret IV (Theban)	
Sekhemrekhutai Sebekhotep I	
Sekhemuazkaure Sebekemsaf I	
Sekhemresesheditai Sebekemsaf II	
Sekhemneferkhaure Upuautemsaf	
Smenkhkhere Mermeshau (Northern)	
Menuazre	
Sekhemresuaztai Sebekhotep II	
Mersekhemre Neferhotep	
Khaneferre Sebekhotep III	
Merneferre Ai I	
Khahetepre Sebekhotep IV	
Khaankhre Sebekhotep V	
Sekhemreherhimaat Intef-‘o III	
Sekhemreupmaat Intef-‘o IV	
Nubkheperre Intef V, <i>c.</i> 1750 (?)	
Nemaatenkhare Khenzer	
Nehesi	

•664• EGYPTIAN KINGS, DYNASTIES XV—XVII

FIFTEENTH AND SIXTEENTH DYNASTIES (Hyksos): c. 1800 (?)–1580 B.C.

Monuments		Manetho
• Semken		
• 'Ant-hal		
Sekhanre? = Yekebbaal		
Meruserre Yekebhal		Salitis
Maa-ab-re Pepi		Bnōn
'Opehtire Nubti (?), c. 1700	} Probable identifications	{ Apakhnas Apophis Jannas (Staan, Siaan) Assis (Aseth)
Nebkhepeshre Apopi I		
Seuserenre Khian		
Nekare II? = Uazed		
'O-user-Re Apopi II		
'O-seh-Re		
'Okenenre Apopi III		

SEVENTEENTH DYNASTY (Theban): c. 1635–1580 B.C.

Sekenenre I Tau-'o	1635–1615
Sekenenre II Tau-'o-'o	1615–1605
Sekenenre III Tau-'o-ken	1605–1591
Uazkheperre Kamose	1591–1581
Senekhtenre	1581–1580

III

LIST OF KINGS AND PATESIS OF SUMER AND AKKAD¹

Dynasty	Date approximate B.C.	Years (according to the lists)	Contemporary patesis of	
			Lagash	Kish, etc.
(1) First dynasty of Kish ² (about 5 names missing)	c. 5500 (?)			
...-bu-um				
...tab-ba		780+		
Galumum		900		
Zukakipu (Scorpion)		840		
Arpu		720		
Etana		635		
Balikh, Walikh, son		410		
Enmenunna, son		611		
Melam-Kish, son		900		
Barsalnunna, son		1200		
Meszagud, son				
..., son				
.....				
About 5 names missing				
Total about 21 kings				

RULERS OF SUMER AND AKKAD

¹ See Langdon, 'The Early Chronology of Sumer and Egypt,' *J.E.A.*, vii (1921), pp. 133-53.

² The 1st Dynasty of Kish and the 1st Dynasty of Erech are based upon Poebel, *Historical and Grammatical Texts*, No. 2, Obv. Cols. i, ii and No. 3, Cols. i, ii. The list on No. 2 was continued into Col. iii, but is broken away at the point where the 1st Dynasty of Ur begins. The names of the 1st Dynasty of Kish are partially preserved on Poebel, No. 5, Obv. i.

Dynasty	Date approximate B.C.	Years (according to the lists)	Contemporary patesis of	
			Lagash	Kish, etc.
(2) First dynasty of Erech (Sumerian)	c. 5000 (?)			
Meskingasher		325		
Emmerkar, son		420		
Lugalbanda		1200		
Tammuz		100		
Gilgamesh		126		
-lugal, son				
About 2 names missing				
Total about 8 kings				
(3) First dynasty of Ur ¹ (Sumerian)	c. 4216			
Mesannipadda		80		
Meskenagnunna		30		
Elulu		25		
Balulu		36		
Total 4 kings		Total 171		
(4) Dynasty of Awan ² (Sumerian) (?)	c. 4045			
.....				
.....				
.....				
Total 3 kings		Total 356 (?)		

¹ The 1st Dynasty of Ur is based upon Poebel, *ibid.*, No. 2, Obv. III, and the Legrain tablet, Obv. I (*Museum Journal*, Philadelphia, 1920, XI, 175-80; see *J.E.A.*, VII, 142, n. 5).

² The names of the Awan dynasty have been given by Poebel, No. 2, Obv. III, 19-197, but only the name *A-wa-an* remains. The number of names in this dynasty is obtained from the summary on Poebel, No. 2, Rev. XI, 16-20. The number 356 given in the summary is reduced to 100 in the above scheme.

(5) Second dynasty of Ur ¹ (Sumerian)	c. 3945		
.....			
.....			
.....			
Total 4 (?)		Total 108 (?)	
(6) Second dynasty of Kish ² (Semitic)	c. 3837		
.....			
.....			
.....			
Total 5 kings (?)		Total 3792 (sic) read 192 (?)	
(7) Dynasty of Khamazi ³ (Sumerian)	c. 3645		
...ni-ish		7	
Total 1		Total 7	Utug... (patesi of Kish)
(8) Third dynasty of Kish ⁴ (Semitic)	c. 3638		Ninkisalsi (Adab)
Mesilim			Lugalshagengur
Urzaged			
Lugal-tarsi			
Lugal... aga			
.....			
Enbi-Ashdar			Ur-Enlil (Nippur)
Total 6		Total 150 (?)	

RULERS: c. 5000 (?)—c. 3488 B.C.

¹ The length of this dynasty is ascertained from the summary in Poebel, No. 2, Rev. XI, 11-15, where the total of the three Ur dynasties is given as 396 years. The 1st and IIIrd Ur Dynasties are given as 171 + 117 years, leaving 108 for the IIrd Dynasty. The total number of kings appears to be either 13 or 14, and the number in the 1st and IIIrd Dynasties is 4 + 5, leaving 4 or 5 names for the IIrd Dynasty.

² The only information concerning this dynasty is preserved on the Lagrain tablet, Obv. II, where the total number of kings is either 5 or 6, more likely 6 in the photograph. The length of the dynasty is there given as 3792. (The number 3600 is written in Sumerian with a single sign.)

³ Based upon the Lagrain tablet, Obv. II, and Poebel, No. 2, Rev. Col. XI end.

⁴ The dynastic lists contain no information concerning the IIIrd Dynasty of Kish, and the IIrd Dynasty of Erech. The number of kings in each is approximately determined by subtracting the known dynasties from the summaries at the end of Poebel, No. 2. The names are supplied from the inscriptions, and the order is based upon later references to Enbi-Ashdar and Enshagkushanna.

Dynasty	Date approximate B.C.	Years (according to the lists)	Contemporary patesis of	
			Lagash	Umma
(9) Second dynasty of Erech (Sumerian) Enshagkushanna Lugal-kigub-nidudu Lugal-kisalsi Total 4	c. 3488	Total 130 (?)		
(10) Dynasty of Adab ¹ Lugal-annimundu (Lugal-dalu) (Mebasi) Total 3	c. 3358	90 Total 90		
(11) Dynasty of Maer ¹ (Sumerian) An-Bu ...gi, son-Babbar Total 4 kings	c. 3268	30 80		
(12) Akshak (Opis) ² (Semitic) Unzi	c. 3188	30	Shuruppak magistrates: Enkhegal (king at Lagash)	
Undalulu		12		
Urur		6		Patesis of Umma
Gimil-Shakhan		20		Eabzu
Ishu-el		24	Ur-Nina (king), c. 3100	
Gimil-Sin		7		
Total 6 kings		Total 99		

¹ Based upon the Legrain tablet, Obv. III.

² Here begins the Scheil dynastic tablet whose obverse contains a complete list of the kings of Akshak, the IVth Dynasty of Kish, and the IIIrd Dynasty of Erech. The summary at the end of the Akshak dynasty is preserved on the Legrain tablet, Obv. IV.

(13) Fourth dynasty of Kish ¹ (Semitic)	c. 3089		Akurgal, c. 3050, son	Ush
			Eannatum, son	Enakallī
			Enannatum I, brother	Urlumma
				Ilī
Azag-Bau (queen and queen-regent for — (?) years)		26 (?)	Entemena, son	
Gimil-Sin, son		25		
Ur-Ilbaba, son		80	Enannatum II, son	Ukush
Zimudar		30	Enetarzi	
Uziwadar, son		6	Enlitarzi, 5 years	
Elmuti		11	Lugalanda, 9, son	
Imu-Shamash		11	Urukagina (king), 6	Lugal-zaggisi, son
Nanija		3		
Total 8 kings		Total 192 (?)		
(14) Third dynasty of Erech (Sumerian)	c. 2897			
Lugal-zaggisi		25		
(15) Dynasty of Agade ² (Semitic)	c. 2872			
Sargon		55	Engilsa	
Rimush, son		15	Ur-E	Surushkin
Manishtusu, son		7	Lugal-ushungal	Lu-Shara
Narām-Sin		56	Ugme	
Sharkalishari, son		25	Urmama	
'Who was king, who was not king?'				
Igi				
Imi		3	Gimil-mama	
Nani				
Elulu				
Dudu		21	Ka-azag	
Gimil-Dur-Ul		15	Ur-Bau, c. 2700	
Total 12 kings		Total 197		

RULERS: c. 2800—c. 2675 B.C.

¹ This list is partially preserved on the Legrain tablet, Obv. iv.

² The Agade dynasty is completely preserved on the Legrain tablet, Rev. i, as now restored; the Scheil tablet, Obv. 23—Rev. 9; and Poebel, No. 3, Rev. viii.

Dynasty	Date approximate B.C.	Years (according to the lists)	Contemporary patesis of	
			Lagash	Umma
(16) Fourth dynasty of Erech ¹ (Sumerian)	c. 2675			
Urnigin		3	Urgar	
Urgir, son		6	Nammakhni	
Kudda		6	Ur-Ninsun	
Migir-ili		5		
Ur-Babbar		6	Ur-Babbar (?)	
Total 5 kings		Total 26		
(17) Dynasty of Gutium ² (Hittite ?)	c. 2649			
Imbia		5		
Ingishu		7		
Warlagaba		6		
Iarlagash		3 (?)		
.....				
.....				
...da				
...ti				
...an-gab				
Si-um				Lugalannatum
(a) Lasirab				
(b) Erridupizir			Gudea (2600)	
(c) Arlagan				Nammakhni
(d) Saratigubisin (?)			Ur-Ningirsu	Galu-Babbar
.....				
Tinkān				
Total 21 kings		Total 125		

¹ Based upon the Scheil tablet, Rev. 10-16, and Poebel, No. 4, Obv. 1.

² This list is partially restored by the Legrain tablet, Rev. 11, and Poebel, No. 4.

(18) Fifth dynasty of Erech (Sumerian)	c. 2524		
Utukhegal			
(Space on Legrain tablet for about two names)			
Total 3 kings		Total 50 (?)	
		(see pp. 434, 441 sq.)	
(19) Third dynasty of Ur ¹ (Sumerian)	c. 2474		
Ur-Engur		18	Urabba
Dungi, son		58	
			{ Lukazal
Bur-Sin, son		9	{ Ur-lama
			{ Alla
			{ Ur-lama (reappointed)
Gimil-Sin, son		8	
Ibi-Sin, son		25	
Total 5 kings		Total 117	(2357)

¹ Based upon Poebel, No. 4, Rev. 1-5.

RULERS: c. 2675—c. 2357 B.C.

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IV

KINGS OF ISIN, LARSA, BABYLON, ETC.¹

Isin	Larsa	Babylonia	Assyria	Elam	Kish, etc.
Ishbi-Girra (2357)	Naplanu(m) (2357)		c. 2500 Ushpia, Kikia c. 2400 Zariku	Kutur-nakhhunte (? c. 2357) Lila-irtash, pre- sumed son	
Gimil-ilishu, son (2325)	Emišu(m) (2336)				
Idin-Dagan, son (2315)					
Ishme-Dagan, son (2294)	Samu(m) (2308)				
Lipit-Ishtar, son or brother (2274)					
	Zabaia (2273)		Enlil-kapkapu		
	Gungunu(m) (2264)				
Ur-Ninurta (2263)			Puzur-Ashir I		KISH. Ashduni-erim
	Abi-sari (2237)		Shalim-akhu(m), son		(c. 2250)

ISIN, LARSA, BABYLON, ETC.

¹ The dates are approximate merely. They depend primarily upon the approximate dates of Shalmaneser and other Assyrian kings of the thirteenth and twelfth centuries, upon their references to earlier kings, and upon references to kings as contemporaneous. In other cases, and where no dates are suggested, the position of kings (e.g. of Assyria) is conjectural. See further above, pp. 152-6, and Chaps. XIII and XV. Ungler's date for the first year of Ammi-zaduga (viz. 1977)—based on Babylonian observations of Venus—is here accepted; but Weidner *M.D.O.G.* 1915 and 1921 makes it 1809, and this discrepancy affects all the early dates.

C.A.H. I	Bur-Sin, son (2235)	Sumu-ilu(m) (2226)	FIRST BABYLONIAN DYNASTY (2225-).			
			Sumu-abu(m) (2225)	Ilu-shuma	Silkhakha (Simiti- Shilkhal)	
	Iter-pī-sha, son (2214)		Sumu-la-ilu(m) (2211)	Irishu(m) I, son		
	Girra-imiti, brother (2209)			Ikunu(m), son		Manana (c. 2212)
	Enlil... (2202) Enlil-bani (2201)			Sharru-kin I, son (c. 2200)		Sumu-ditana Yapium (c. 2206) ? Khalium
		Nur-Adad (2197)				KAZALLU. Yakhzir-ilu (2194- 2187)
		Sin-idinna(m), son (2181)		Puzur-Ashir II		
	Zambia (2177) ? (2174) ? Ur-azag (2169)	Sin-iribu(m) (2175)	Zab(?)u(m), son (2175)			
		Sin-ikisha(m) (2173) Šilli-Adad (2168) Warad-Sin (2167), son of Kutur- Mabuk			Kutur-Mabuk (c. 2167)	ERECH. Siniriba(m) (con- temp. Warad-Sin)
	Sin-magir (2165)			Akhi-Ashir		
43		Abil-Sin, son (2161)		Rim-Sin (of Larsa)		
		Rim-Sin I, brother (2155)				

KINGS: c. 2357—c. 2155 B.C.

Isin	Larsa	Babylonia	Assyria	Elam	Ereh
Damik-ilishu, son (2154-2125)		Sin-muballit, son (2143)	Irishu(m) II		Warad-nene (con- temp. Rim-Sin)
		Hammurabi, son (2123)	Shamshi-Adad I (living c. 2113?) Ishme-Dagan I, son		
		Samsu-iluna, son (2080)			
FIRST DYNASTY OF THE SEA-COUNTRY (c. 2070-1703). Iluma-ilu (c. 2070)	Rim-Sin II (2071) (p. 556)				
	? Iluma-ilu		...-ashshat		
		Abeshu', son (2042) Ammi-ditana, son (2014)			
Itti-ili-nibi (2010)		Ammi-zaduga, son (1977)	Rimush	Sadi or Taki	
³ Damki-ilishu (1955)		Samsu-ditana, son (1956-1926)			Anam Sin-gashid Sin-gamil

Ishkibal (1919)		Adasi	(?) Arad-shagshag
Shushshi (1904)		Enlil-bani, son	
Gulkishar (1877) ¹		Shabai	
Peshgal-daramash, son of Gulkishar (1822)		Shar-ma-Adad I	
A-dara-kalama, son (1772)		Gizil-Sin	
		Zimzai	
		Lulla	
	KASSITE DYNASTY (c. 1746-1169). Gandash (1746)		
Akur (Ekur)-ul-ana (1744)		Shi-Ninua	
	Agum I, son (1730)	Shar-ma-Adad II	
Melam-kurkura (1718)		Irishum III	
		Shamshi-Adad II (1716)	
Ea-gamil (1711- 1703)			
	Kashtiliash I (1708)		
	Ushshi (1686)	Ishme-Dagan II, son (1686)	
	Abirattash (1678?)	Shamshi-Adad III, son (1661)	
	Kashtiliash II(1636)	
	Tazzi-gurumash (1636)		
	Kharba-Shipak (1611)	Puzur-Ashir III (1611)	
(1586)	Enlil-nasir (1586)	
	Agum II (1561- 1537)	Nur-ili (1561- 1537)	

¹ According to new Ashur texts another king ...ri-en is to be inserted here.